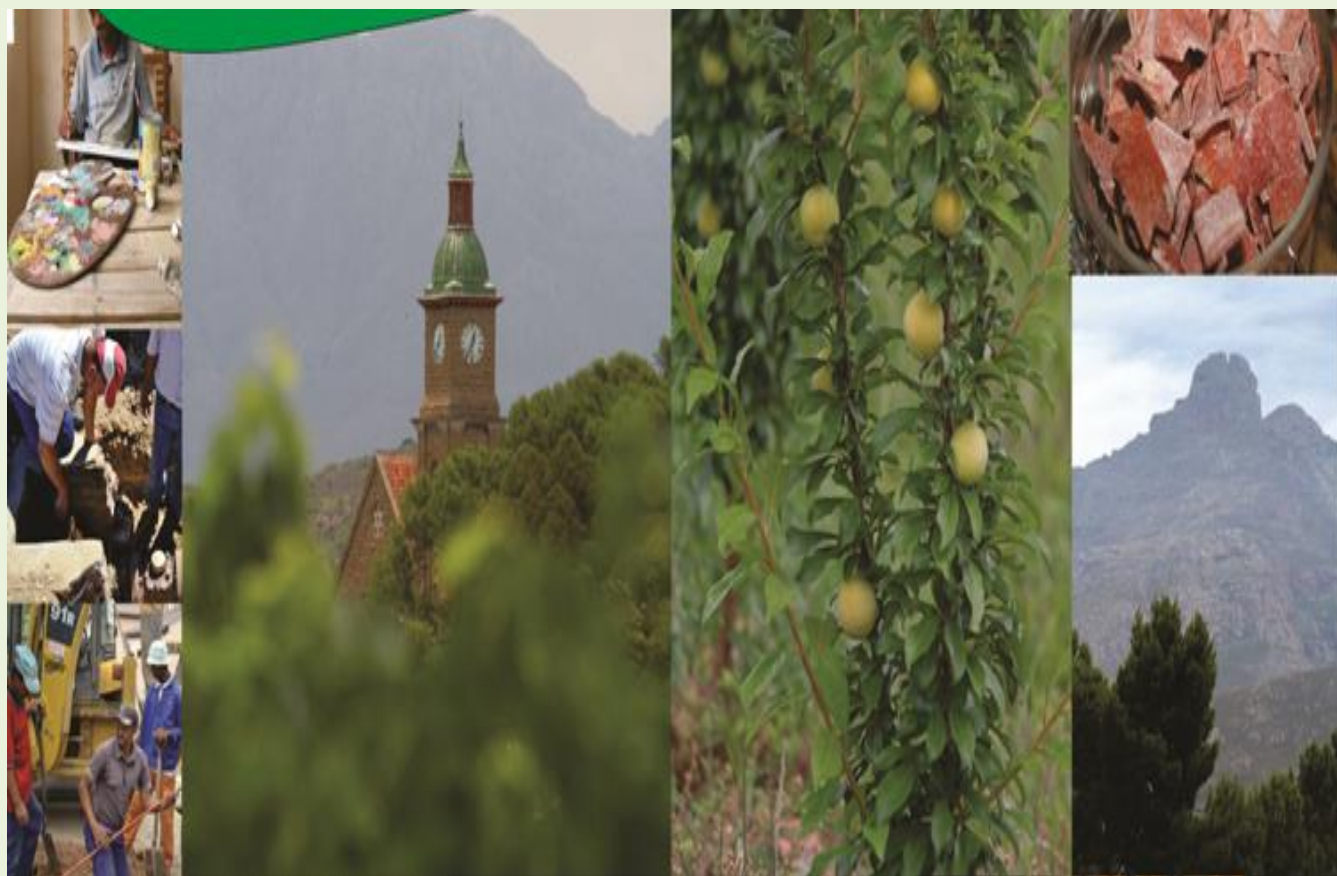




KANNALAND
MUNISIPALITEIT / MUNICIPALITY



FINAL 4th GENERATION INTEGRATED DEVELOPMENT PLAN (IDP)

2017/2022

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History of Kannaland

Kannaland Municipality is named after a plant called 'kanna' in Khoi. Indigenous to our area,

this is a lush, low-growing succulent that is commonly known as Kanna, Canna, or Kougoed. The area is located in the succulent Karoo biome that features these desert-adapted species in abundance. The route offers a range of attractions linked to people, biodiversity, history and culture.

The logo of Kannaland Municipality includes the following elements:



The Kanna flower, unique to our district and after which our area is named.



A light green swirl, representing Route 62 on which we are situated, as well as our embracing of the community.



The K symbol, reinforcing our name and our bond to the community.

The use of shades of green reflects the vegetation that surrounds us in our river valleys, highlights the vital importance of sensitivity to environmental and ecological issues in our area, and indicates our commitment to growth and productivity.

Vision Statement:

The Place of Choice”

To create the ideal environment in which the people of Kannaland would like to live and work.

The environment influences one’s choice – in this respect, the choice of a working place and residence. It is up to the leaders of this municipality to create that ideal environment that would not only make those already here to want to remain here, but also to retain and draw the highly skilled ones who would eventually make Kannaland and the municipality a great place.

You create such an environment by:

- caring for your youth and women;
- encouraging work ethos;
- ensuring sound financial practices,
- practising good governance;
- promoting community involvement in local governance;
- being courteous to visitors;
- spending less time plotting bad media publicity; and by
- stimulating the local economy.

Mission Statement

The Mission of the Kannaland Municipality is:-

Sustainable growth

- Promote sustainable growth patterns which mitigates climate change and which enhances the quality of life of residents through sustainable living practices and which contributes to the local economy.

Sustainable Human Settlements

- Promote the establishment of sustainable human settlements in providing housing to residents.

Healthy community

- Promote a healthy community with access to health bearing services such as sewage, sanitation, safe streets, lighting

Infrastructure Investment

- Promote the development and maintenance of infrastructure which promotes service delivery, growth in jobs and facilitates empowerment and opportunity.

Opportunity driven

- Promote the increase in opportunities for growth and jobs, driven by private sector and the public sector, by creating an enabling environment for business and provide demand-led private sector driven support for growth sectors, industries and business.

Compliance

- Promote the municipality as a compliant and accountable sphere of local government which is characterised by good governance.

Intergovernmental relations

- Promote the management of effective Intergovernmental Relations

Integrated Planning

- Promote effective Integrated Development Planning which relates to all spheres of government and civil society.

Participation

- Promote the participation of the community in the working of the municipality.

Capacity

- Promote capacity development within the municipality area so that effective service delivery can be advanced.

Maintenance

- Promote well maintained municipal infrastructure through operations and management.

Disaster Management

- Effective disaster management practices in collaboration with other spheres of government and the District Municipality.

Quality Services

- A fully functional department accountable for delivering quality services to local government of physical assets.

Corporate Values

**Kannaland Municipality's key values
are:**

- ✓ **Dignity**
- ✓ **Respect**
- ✓ **Trust**
- ✓ **Integrity**
- ✓ **Honesty**
- ✓ **Diligence**

Executive Summary

Introduction

Integrated Development Planning is a process that has become central to local government in driving processes to ensure delivery to residents of a municipality. Integrated Development Planning has been developed as a consolidated municipal planning process that provides a framework for the planning of future development in a municipality. It ensures horizontal and vertical co-ordination and integration across the three spheres of government: national, provincial and local. The consultation process is therefore critical due to the success of every South African municipality's attempt to bring about responsive, developmental local government and poverty alleviation.

Background

Kannaland Municipality is a Category B Municipality in the Eden District. It is the smallest municipality in the Western Cape Province and in South Africa. Despite the small economic and state of financial climate, the municipality thrive to deliver services to the community.

Legislative Mandate

The Municipal Systems Act (MSA) Act 32 Of 2000 requires Council to develop Integrated Development Plans which should be single, inclusive and strategic in nature. The IDP of a municipality will guide development within the council's area of jurisdiction, once adopted; an IDP should also be reviewed annually. In addition the Act also stipulates the IDP process and the components to be included.

Purpose

The purpose of Integrated Development Planning is to facilitate faster and more appropriate delivery of services and provide a framework for economic and social development in a municipality. Section 34 of the Municipal Systems Act determines that a municipal council must review its integrated development plan annually in accordance with an assessment of its performance measurements and as changing circumstances demand.

Strategic Agenda

The municipality is the major arena of development planning. It is at this level of government where people's needs and priorities and local conditions have to be linked, with national guidelines and sectorial considerations, to specific projects and programmes. The Kannaland Municipality therefore developed a 5-year strategic plan.

In order to achieve the outcomes and objectives of the Municipality the Municipality is categorized in seven strategic (key) performance areas. The strategic framework is based on the following:

 Key Performance Area 1: Reliable Infrastructure:

The objective of the Kannaland Municipality is to provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens. There is a urgent need for the Municipality to upgrade and maintain its infrastructure. With regards to infrastructural planning, the municipality is in the process of finalising an Integrated Municipal Infrastructure Plan to eradicate any infrastructural backlogs.

Electricity is the main energy source of households within this municipal area. Kannaland electricity infrastructure is out-dated and in need of urgent upgrade. Currently a electricity master plan has been developed which aims at the evaluation and guidance of the operating and maintenance processes as well as to reduce losses in income due to aged and failing infrastructure as well as the demands of new infrastructure. The municipality has applied for INEP funding to fund the identified infrastructure. Due to the financial shortcomings faced, the municipality has expressed various needs for infrastructure upgrade in the Municipal area at IGR paltforms.

Funding has been obtained for the Taxi route upgrade in Ladismith, and the Municipality aims to upgrade all gravel internal roads in Zoar with paving material. The project will be registered through MIG for funding in 2017/18 – 2027/28. Approximately 20 kilometres will be paved over a ten year period. The municipality also aim to upgrade all sidewalks and pavements in Calitzdorp. It is listed in the Integrated Transport Plan to upgrade the entire municipal (internal) municipal roads with the Kannaland municipal areas.

Over a three year financial period, the municipality plans to upgrade the waste water treatment works (WWTW) in Zoar. It was prioritised for the outer financial years to seek for possible support to upgrade the waste water treatment works in Ladismith and Calitzdorp. Funding has been obtained for the upgrade for the water reticulation system in Zoar, Calitzdorp, Ladismith and Van Wyksdorp over the next three years. Economic Development in the Ladismith area (which is the biggest economic node in the Kannaland Municipal area) has been hampered by the lack of water storage capacity and bulk waste treatment capacity.

The municipality will initiate the process for the establishment of a bulk water storage facility (dam) for the municipal area in partnership with the other two spheres of government. In order to upgrade water meters, the municipality obtained funding to install and upgrade water meters in all 4 wards. The entire Western Cape currently faces a serious drought due to poor rainfall during our 2016 winter season. The demand for water has also steadily increased every year due to the province's rapidly growing population and economy. This, as well as climate change, has added significant pressure on our water supply.

The National Waste Information Regulations requires of municipalities that they must submit actual quantities of waste for the different activities they are registered for on IPWIS from 2018. Kannaland will also be required to obtain funding and make provision for the acquiring of such equipment in their municipal budget. Funding has been allocated for upgrade of the Calitzdorp and Vanwyksdorp landfill transfer stations.

Key Performance Area 2: Service Delivery:

The objective of the municipality is to provide basic services to all its residents and to improve community relationships. The delivery of municipal services in electricity, water, sanitation, refuse, roads and storm water is a key function of the Kannaland Municipality.

The Municipality faces significant service delivery challenges, including the roll out of services to rural areas and under serviced households, ensuring adequate maintenance of assets occur, controlling the rising unit costs of service delivery, addressing future bulk supply shortages and ensuring adequate investment in economic infrastructure.

Ward Committees have been established in all 4 Wards and communities have already expressed themselves on their service delivery needs. During 2017/8 the Municipality will review the service delivery strategies and service levels and will seek opportunities to service delivery partnerships and the development of a delivery plan and charter for implementation. The Municipality will initiate the process to obtain a source for the funding for the appointment of a service provider to facilitate the development/review of an integrated approved Human Settlement Plan.

Various housing projects are being planned in partnership with the Provincial Government for implementation over the next 5 years. The Municipality also has a responsibility to

provide for the needs of the indigent in the Municipality. This is placing a major burden on the finances of the municipality.

During the 2017/18 financial year the Municipality will seek funding to appoint a service provider to develop a service delivery strategy for the indigent and in the rural areas and for decaying or underserved urban areas and to ensure that sufficient infrastructure and bulk services capacity is available to reduce backlogs and to create an environment conducive for development and economic growth. Funding allocations have already been made for the provision of services to Ladismith informal settlements.

Key Performance Area 3: Safe Communities:

The objective of the Municipality is to strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks. The function of the traffic service is critical to ensure overall law enforcement and road safety within the Kannaland municipal area. A Traffic Safety and revenue plan will be developed during the 2017/18 financial year, with the assistance of the Provincial Treasury and Department of Local Government.

The Municipality will review the status of preparedness and contingency plans associated with the prevailing risks identified in the area and to also reflect possible risk reduction projects during the first three years of the 2017-2022 Financial Years. The Eden District Municipality has agreed to provide Fire and Rescue Services within the Kannaland Municipal area as the Municipality does not have the capability to do so. The municipality aim to also develop a traffic by-law during the 2017/18 – 2019/2020 financial years.

Key Performance Area 4: Socio-Economic Development:

The objective of the Municipality is to facilitate economic growth and social and community development. The Municipality is placing a high premium on the improvement of community facilities. In Calitzdorp and Zoar the sport fields will be upgraded and a new cemetery will be established in Ladismith. The Municipality also aims to improve its environment and a pollution control strategy will be implemented. The Kannaland's local economy is built on the opportunities created by tourists visiting the area. It is essential that the tourism industry be further developed and investment into this industry be promoted to ensure continuous growth. The Municipality will therefore engage stakeholders and consider allocations for tourism development, Art and Culture promotion and SMME development.

The Municipality will identify plans aimed at enhancing the quality of health for the Kannaland communities and the budget requirement for the development of an Air Quality Management will be identified and sourced. The Klein-Karoo has vast developmental potential, especially in terms of agriculture and agro-processing. Agriculture is an important economic sector. The Municipality will participate in the Agri-Parks Programme of the Provincial Government and the dairy, fruit and livestock economic sectors will be analysed in order to determine the output and benefit that can be gained from these sectors.

The rural character and sensitive natural environment will be protected. The Municipality will identify the cost and source the funding for the development of an Alien Invasive Control Management Plan and assess the influence of climate change.

Key Performance Area 5: Effective and Efficient Governance

One of the key factors to the success of a Municipality is to be stable, well-managed and efficient. The Municipality will promote efficient and effective governance with high levels of stakeholder participation. The political and administrative leadership of Kannaland Municipality will position itself to manage competing demands for limited resources in a fair equitable and efficient manner.

The Municipality will draft and update all municipal policies, strategies and operational plans over the next three years. This will be done to ensure that municipal activities, rules and procedures are consistent with all relevant policies, legislations and by-laws.

The Municipality will improve communication of the vision, strategy and plans both internally and externally, to keep staff informed, capacitated and to manage the expectations of the community. In the Agricultural sector, improved processes will be introduced to support inclusive participation in agricultural value-chains and fostering an environment conducive to local and regional private sector investment. Community participation in the structures of local government will be strengthened in all the areas in the Municipality.

Key Performance Area 6: Efficient Workforce

The objective of the Municipality is to provide an efficient workforce by aligning institutional arrangements to the overall strategy. The staff component is the biggest single budget item and hence the development, motivation and utilization of staff are a high priority. Institutional transformation is needed in order to bring stability in the council administration, to fill management vacancies, conduct organizational redesign and to compile all job

descriptions and job evaluations for all posts. Funding will be sourced in order to appoint a service provider to conduct an organisational review over the first two financial years in order to ensure that the organogram is aligned to the IDP, funded and the correct person is in the correct job, job descriptions are up to date and evaluated.

The municipality will also develop a Human Resource Strategy that will influence the operations of current policies and possibly the compilation of new policies.

The new strategy will also assist the municipality amongst other with the most effective placement of employees. The Municipality aims to maximize employee development by creating development opportunities for the municipality's employees by maximizing existing developmental opportunities. An Individual Performance Management programme for all managers/supervisors up to the third level of reporting will also be implemented. The municipality has developed a Work Place Skills Plan (WSP) of which the main objective is to ensure that there is staff development through training interventions for all levels of staff.

Key Performance Area 7: Financial Sustainability

The objective of the Municipality is to strive towards a financially sustainable municipality. Kannaland Municipality has a duty to improve financial management across expenditure, revenue, assets, supply chain, debt and financial reporting streams to determine the most effective way of solving its financial problems. Due to the challenges the Municipality has been and is still experiencing, a Financial Recovery Programme has been introduced by the Provincial Government in order to bring the financial management of the Municipality to the required norms and standards. The Municipality will review the budget and expenditure management systems to ensure that efficient and effective service delivery is in line with Municipal priorities.

The revenue management systems will be reviewed in order to maximise revenue generation possibilities and improve revenue performance. The Municipality will introduce measures to enhance levels of customer care, increase responsiveness to consumer billing and other queries. The Municipality will review cash and debt management strategies and practices. The Municipality will review internal controls and delegations regarding financial management. Funding needs to be sourced in order to develop and integrated infrastructure and asset management plan.

This will entail the review and updating of the Asset Register. The Municipality will review governance practices in the Supply Chain practices and implement proper controls and

risk management practices. The Municipality will initiate a process towards the review of IT infrastructure and implement accounting in order to ensure that financial systems are in line with the Municipal Budget and Reporting Reforms.

Overview IDP Cycle

This Final annual review makes provision for project and programmes that has to be implemented from the 1st of July 2017 until 30th June 2022. Projects will be fully implemented by the end of this financial year because implementation is still on track and the municipality will be able to spend the budget approved by council.

Spatial and IDP Mapping

The municipal Spatial Development Framework (SDF) is in process to be amended and approved and will be used to develop Kannaland municipal area in the long term. Further work will be done on the SDF and will be implemented with the approved SDF. The IDP Project Spatial maps are included and indicate current and future development of the municipal area.

Disaster Management

The formulation and implementation of a Disaster Management Plan forms part of the Municipality's IDP process. The purpose of this Disaster Management Plan [Disaster Management Act 57 Sect 53 (2)] is to ensure that there is Disaster Management at all times enhancing the Municipality's ability to prevent and to deal with disasters and to avoid development that is considered high risk in terms of the potential for disasters.

This chapter gives an indication on the readiness of the municipality in case of a disastrous event. It also identifies projects and programmes that will be implemented to reduce risks and the mitigation measures that are put in place to enable vulnerable groups to be resilient.

Annexures & Appendices

The contingency plans as well spatial plans will be included as a guide to strengthen the read of the IDP document.

Foreword Executive Mayor



The Municipality has faced various challenges over the past ten years which will require discipline, commitment and hard work to overcome. This Integrated Development Plan shows that the Municipality will continue to implement its Municipal Strategy in a manner that builds confidence.

The Municipality aims to be well managed and accountable, taking prudent stewardship of public funds, the safeguarding of public assets, and the effective, efficient and economical use of public resources.

The implementation of this IDP will be one of the Municipality's greatest challenges faced as it is with severe financial constraints, insufficient capacity and inadequate resources. Kannaland Municipality inherited huge outstanding debt, assets that were in a poor and unusable state, and many that remain unaccounted for. The Municipality will require a great deal of support and assistance to achieve its strategic objectives, which aim to create a better situation and a good quality of life for its communities, as summarised in the IDP's Strategic Context.

The Municipality will manage its resources in a manner to mitigate risks; make improvements in basic infrastructure; improve municipal financial management and will aim to receive clean audits. Public participation will remain an important priority for the Municipality. All relevant stakeholders will be engaged in strengthening ward committees to retain a connection with communities in relation to projects and initiatives of the Municipality. The emphasis in the coming year and beyond, is to reinforce public participation processes by introducing focused sector meetings on regular basis.

In order to establish a sound living environment, we will address, in collaboration with other spheres of government to deal with housing delivery backlogs, the introduction of innovative solutions and the acceleration of the implementation of the social housing policy.

A concerted effort including massive campaigns will be made to address grime and crime across the city. The local economic development strategy will receive the necessary attention to ensure that they are realized. We will also revise our organizational structure to ensure that it is responsive to the challenges facing the Municipality.

This report will show how we are working in collaboration with government departments and private business in the provision of services to our communities.

Executive Mayor

Executive Mayor Magdalena Barry

Foreword by the Municipal Manager



The Kannaland Municipality has been faced by consistent failures to fulfil its executive obligations over a prolonged period. This has affected the morale of staff and the ability of the Municipality to present itself as a dynamic, growing and positive entity. Linked to the inherent challenges the financial sustainability of the Municipality is threatened.

One of the main priorities over the short term will be to stabilise and strengthen the Municipal administration. This will require the review of systems, policies and procedures in an array of corporate, institutional and administrative functions that will have to be designed and put in place.

Oversight, risk management and internal audit controls will be addressed in order to ensure value for money spending and to prevent irregular, fruitless and wasteful and unauthorised expenditure. Currently the Kannaland Municipality faces severe financial constraints, infrastructure deficits, backlogs and institutional instability. A Financial Recovery Plan was developed to attempt and balance the budget, reduce debt to sustainable levels, benchmark its revenue and expenditure.

This will result in providing for the current contingent liabilities and to build reserves to invest in infrastructure that will promote its development and shared growth. The tariff structure will be reviewed in order to recover the cost of service rendering and allowing infrastructure to be maintained and upgraded.

The challenge of a high occurrence of indigent customers places a strain on municipal resources and the ability to function as a going concern. The continuity of senior management staff has also resulted in institutional and administrative difficulty. The administrative structure will be reviewed with recent and accurate job descriptions. The right person must be placed in the right job and the capacity and skills of employees should also be addressed in order to enable them to fulfil their administrative and technical duties.

The aim is to transform the Municipality's organisational culture to one that is characterised by passionate employees, relentless in their pursuit for excellence. I would like to extend my appreciation and gratitude to the Mayor, Speaker, and Councillors, as well as Municipal staff, for their ongoing support and commitment to build a better future for all who live in the Municipal area.

Lastly, I would like to thank the management and IDP team for their dedication, commitment and hard work for an effective and successful IDP development process under difficult circumstances.

Acting Municipal Manager
Petro Allan Williams

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Glossary of Acronyms

BBBEE	Broad Based Black Economic Empowerment
CAPEX	Capital Expenditure
CDW	Community Development Worker
CIP	Community Integrated Projects
DBSA	Development Bank of South Africa
DORA	Division of Revenue Act
DWA	Department of Water Affairs
EIA	Environmental Impact Assessment
EPWP	Expanded Public Works Program
IDC	Industrial Development Corporation
HSP	Human Settlements Plan
IDP	Integrated Development Plan
INEP	Integrated National Energy Plan
IRS	Implementation Ready Study
KPA	Key Performance Area
KPI	Key Performance Indicator
LED	Local Economic Development
LGTAS	Local Government Turnaround Strategy
MIG	Municipal Infrastructure Grant
MSIG	Municipal Systems Improvement Grant
MSIG	Municipal systems improvement grant
NDP	National Development Plan
OPEX	Operational Expenditure
PACA	Participatory Appraisal of Competitive Advantage
PMS	Performance Management System
PSO	Provincial Strategic Objectives
RBIG	Regional Bulk Infrastructure Grant
SALGA	South African Local Government Association
SDBIP	Service Delivery and Budget Implementation Plan
SMME	Small, Micro and Medium Enterprises
WTW	Water Treatment Works
WWTP	Waste Water Treatment Plant
WWTW	Waste Water Treatment Works

Chapter 1 – Introduction: Strategic Planning

1.1 Integrated Development Planning

Integrated Development Planning is an approach to planning that involves the entire municipality and its citizens in finding the best solutions to achieve good long-term development. An Integrated Development Plan is a strategic plan for an area that gives an overall framework for development. It aims to co-ordinate the work of local and other spheres of government in a coherent plan to improve the quality of life for all the people living in an area. It should take into account the existing conditions and problems and resources available for development.

The plan will look at economic and social development for the area as a whole. It must set a framework for how land should be used, what infrastructure and services are needed and how the environment should be protected. Integrated Development Planning is the strategic tool of a Local Municipality, designed to bring together and to harmonize individual plans of the municipality's departments. The plan guides all future development of the municipality by setting priorities, allocating resources and defining time frames and indicators.

The IDP has a lifespan of 5 years that is directly linked to the council's elected term of office. After every local government elections, the new council has to prepare their IDP in terms of the strategic planning and development. The IDP should be based on long term spatial, infrastructure and finance plans. The standards of service delivery, financial planning and reporting will therefore be monitored through an effective performance management system.

Municipalities are encouraged and supported by both national and provincial government to develop realistic and credible IDP's that not only comply with relevant legislation but also –

- are owned by local leadership, municipal management and community as the single strategic plan to direct resources within the municipality;
- driven by the management team and systems within the municipality with implementation regularly monitored during the year through the performance management system;
- contain a long-term development strategy guiding investment across the municipal area;
- provide an investment plan for national, provincial and local government and non-governmental stakeholders to enhance and enable joint planning and resource alignment to improve service delivery to all stakeholders; and
- include local area plans to localise the strategy and implementation of the IDP.

This schematic diagram is to inform and guide how the strategic cycle for the five-year term (2017-2022) will be implemented through revision of the IDP annually:



Figure 1: IDP strategic planning cycle

1.2 The fourth generation IDP

The first generation IDP's dealt with the period 2002-2007, the second generation IDP's from 2007-2012 and the third five year IDP cycle from 1 July 2012 up to 30 June 2017. This fourth generation IDP was developed after the August 2016 elections and will be effective from 1 July 2017 up to 30 June 2022.

The aim of the development of the fourth generation IDP is to advance the service delivery by providing the framework for economic and social development within the municipality as well to enhance the good governance. The IDP must not simply be a wish list; it should clearly set out what can realistically be achieved given the capacity and resource constraints facing a municipality.

The Kannaland Municipality IDP will:

- comply with all relevant legislation and be owned by local leadership, municipal management and community as the single strategic plan to direct resources within the Municipality;
- be driven by the management team and systems within the Municipality with implementation regularly monitored during the year by means of the performance management system;
- contain a long term development strategy that can guide investment across the municipal area;
- the spatial development framework is considered and contains a Spatial link between IDP-Budget-SDBIP;
- provide an investment plan for national, provincial and local government and non-governmental stakeholders to enhance and enable joint planning and resource alignment to improve service delivery to all stakeholders and reflect community inputs;
- contains a clear vision for the area, with objectives, project and initiatives to realising and financing the vision in partnership with other stakeholders;
- the citizen and community is the central focus of the IDP and take into account the physical and social demographics.

All stakeholders have been identified and considered (Ranging from the community, National and Provincial departments, SOEs, Parastatals and Business) and was allowed to contribute towards the determination of the priorities for the Municipality.

1.3 IDP Legislative Framework

The mandate of the municipality is provided for in section 152 of the Constitution of South Africa that stipulates the objectives for developmental local government, namely:

- to provide democratic and accountable government for local communities;
- To ensure the provision of services to communities in a sustainable manner
- To promote social and economic development;
- To promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisations in matters of local government.

Although the implementation of the IDP is monitored through the performance management system, an annual process is required to check the relevance of the strategic plan within a dynamic environment.

The IDP is given legal status by the following primary and secondary legislation and regulations:

- The Municipal Systems Act 32 of 2000 (referred to as MSA)
- The Municipal Finance Management Act No. 56 of 2003 (referred to as MFMA)
- Municipal Planning and Performance Management Regulations, 2001: Department of Provincial & Local Government

The Municipal Systems Act 32 of 2000 requires that all Municipalities must prepare and adopt an Integrated Development Plan (IDP) and must subject it to an annual review. In terms of Chapter 5, Section 25, all Municipalities must, within a prescribed period after the start of its elected term, adopt a single, inclusive and strategic plan for the development of the Municipality. Section 34 of the same chapter requires a Municipality to review the IDP annually and, where necessary, to amend the plan in accordance with a prescribed process.

In addition to the requirement for every Municipality to compile such an Integrated Development Plan, the Municipality is also required to monitor and evaluate its performance. Section 34 of the MSA deals with the review and amendment of the IDP:

A Municipal Council must review its Integrated Development Plan annually in accordance with an assessment of its performance measurements in terms of Section 41; and to the

extent that changing circumstances so demand; and may amend its Integrated Development Plan in accordance with prescribed processes.

The IDP has to be reviewed annually in order to:

- Ensure its relevance as the Municipality's strategic plan;
- Inform other components of the Municipal business process including institutional and
- financial planning and budgeting;
- Inform the cyclical inter-governmental planning and budget cycle.

The Local Government: Municipal Planning and Performance Management Regulations, 2001 states in Chapter 2 that the IDP review and amendment process must adhere to the public participation requirements as outlined in Chapter 4 of the MSA.

Section 16(1) of the MSA requires that a Municipality must develop a culture of Municipal governance that complements formal representative government with a system of anticipatory governance, and must for this purpose encourage, and create conditions for, the local community to participate in the affairs of the Municipality.

Regulation 2(4) of the Local Government Municipal Planning and Performance Management Regulations, 2001 requires that:

- only a member or committee of a municipal council may propose an amendment to the IDP;
- the proposal to amend must be accompanied by a reason and be aligned with the district
- IDP;
- the amendment is adopted by a decision of the Municipal Council;
- all the members of the council be given reasonable notice;
- the proposed amendment/s be published for public comment for a period of at least 21 days in a manner which enables the public to make representations in this regard; and the applicable district Municipality be consulted.

During 2003 the Municipal Financial Management Act (MFMA) was enacted which specifies a number of time frames for the tabling and adoption of the Municipal Budget and amendments to the IDP. In terms of Section 16 and 17, the Mayor must, at a Council meeting not later than the 31st of March each year, table any draft and proposed amendments to the IDP with the draft budget. In terms of Section 24 of the MFMA, the municipal council must at least 30 days before the start of the budget year consider the approval of the annual budget. Both pieces of legislation

(Municipal Systems Act and the Municipal Financial Management Act) emphasize the close relationship between the budget processes.

1.4 Kannaland IDP Process

The IDP was developed in terms of an IDP process plan developed to ensure that the IDP process complies with certain minimum quality standards, to ensure that proper coordination between and within the spheres of government is established and engaged during the preparation of the IDP.

Council approved the process plan for 2017-2018 on 31 Augustus 2016 which sets out the methods and approached according to which the IDP planning process to be conducted. The purpose of the process plan is to indicate the various planned activities and strategies on which the municipality will embark to compose its integrated development plan and the budget for the 2017/18 financial year as well the four outer years (activities and dates are subject to change).

The process plan enhances integration and alignment between the IDP and Budget, thereby ensuring the development of an IDP-based budget. It fulfils the role of a business plan or an operational framework for the IDP process outlining the manner in which the IDP process will be undertaken. In addition, it identifies the activities in the processes around the key statutory annual operational processes of the budget and IDP compilation, performance management implementation and the adoption of the municipality's annual report.

The IDP and Budget processes are two distinct but integrally linked processes which must be coordinated to ensure that the IDP and budget related policies and the final budget are mutually consistent and credible. Credibility refers to the municipality's ability and capacity to spend and deliver services in accordance with its approved budget. The process creates its own dynamics since it encompasses the involvement of external role-players and vested interest groups, therefore it requires accurate logistical planning and arrangements of engagement sessions to ensure that the process is implemented in accordance with the approved schedule.

1.4.1 IDP and Budget Process Plan Legislative Requirements

According to Section 28(1) of the Municipal System Act, No 32 of 2000 a municipal council must adopt a process set out in writing to guide the planning, drafting and review of its integrated development plan. This Process Plan outlines the programme to be followed and provides detail on the issues specified in the Act. A process plan must include the following:

- A programme specifying time-frames for the different steps;

- Outline mechanisms, processes and procedures for consultation of the community, organs of state, traditional authorities and role-players;
- Identify all plans and planning requirements binding on the municipality;
- Be consistent with any other matters prescribed by legislation.

Section 21(1) of the Municipal Finance Management Act (Act 56 of 2003) further prescribes that the Mayor of a municipality must co-ordinate the processes of preparing the annual budget and for reviewing the municipality's IDP. It is therefore imperative that a time schedule outlining the key activities in the process with deadlines for attainment be tabled to Council for approval ten (10) months prior to the final approval of the IDP and Budget.

In order to ensure certain minimum quality standards of the IDP process and a proper coordination between and within the spheres of government, the preparation of the planning process is regulated by the Municipal Systems Act, No 32 of 2000. Section 28 of the Systems Act stipulates that:

- Each Municipal Council must adopt a process set out in writing to guide the planning, drafting, adoption and review of the IDP.
- The municipality must through appropriate mechanisms, processes and procedures established in terms of Chapter 4, consult the local community before adopting the process.
- A municipality must give notice to the local community of particulars of the process it intends to follow.

In terms of Section 29(1) of the Municipal Systems Act the process must:

- be in accordance with a predetermined programme specifying timeframes for the different steps;
- through appropriate mechanisms, processes and procedures allow for the local community to be consulted on its development needs and priorities, allow the local community to participate in the drafting of the IDP, and allow organs of state, including traditional authorities, and other role players to be identified and consulted on the drafting of the IDP;
- provide for the identification of all plans and planning requirements binding on the municipality in terms of national and provincial legislation.

The approved detailed process plan is depicted as follows

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Preparation	Conduct an assessment of progress of the performance measurements and changing circumstances in the municipality to constitute a review of the IDP	Executive Mayor Municipal Manager		04										
	Tabling of the draft IDP Review & Budget Time Schedule to the MAYCO meeting: Tabling of draft IDP & Budget Time Schedule to Council	Executive Mayor Council		31										
	District IDP Managers Forum – Alignment of IDP Review and Budget Time Schedule with District Framework Plan	Eden District IDP Manager												
Analysis	Review of the Performance Management System (PMS)	Performance and Compliance Officer	31											
	Review the annual performance against SDBIP's	Performance and Compliance Officer		30										
	Assess the municipal financial position and capacity (based on the Annual Financial Statements of previous budget year)	Chief Financial Officer		25										

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS

JULY2017 – JUNE 2018

Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	Review budget-related policies and set policy priorities for next 3 financial years	Chief Financial Officer	31												
	Determine the funding/revenue potentially available for next 3 years	Chief Financial Officer				10									
	Determine the likely financial outlook and identify changes to fiscal strategies	Chief Financial Officer					28								
	Refine funding policies; review tariff structures	Chief Financial Officer												29	
	Evaluation of matters identified in IDP Assessment Report received from MEC: Local Government	IDP Coordinator									29				
	Determine any changes in the Socio-economic conditions & trends of Kannaland Municipality	Senior Management		27											
Consultation	Advertising a schedule of public meetings per ward	IDP Coordinator				17				15					
	Embarking on a public participation process via public meetings per ward to:	Executive Mayor								15		25			
	Provide feedback on progress of ward priorities	Councillors													
	Presentation of IDP Review & Budget time schedule	Senior Management													
	Obtain input on community needs for the IDP Review														

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY2017 – JUNE 2018												
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	process														
Strategy	Strategic Planning Session to conduct a mid-term review: Council's Strategic Objectives Assessment of the performance of implementation of Council's 5yr strategic plan (2012-2017 IDP)	Executive mayor Senior Managers						04	15						
	Prioritisation of development objectives, projects & programmes by Ward Committees: Facilitate a more inclusive consultation process for the prioritisation of ward projects/programmes	Ward Councillors Ward Committees IDP Coordinator Communication Officer			15	19				28		25			
	IDP Indaba 1 engagement Alignment of Strategic objectives of the municipality with that of the provincial and national government departments	Municipal Manager IDP Coordinator			15										
	District IDP Managers Forum Meeting	Eden District IDP Coordinator								23					
	Provincial IDP Managers Forum Meeting	Provincial Dept. of Local Government IDP Coordinator				15									

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS

JULY2017 – JUNE 2018

Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	IDP INDABA 2 engagement: Identify projects & programmes which might need support/financial assistance from Government Referring of community issues which have been identified during IDP process but are not competencies of Local Government to the relevant National & Provincial Sector Departments Follow up on IDP Indaba agreements	Provincial Dept. of Local Government IDP Coordinator								26					
	Identification of new Capex/Opex projects & programmes culminating from the IDP Review Process	All departments								15		25			
	Prioritisation of internal & external Capex&Opex projects & Programmes	IDP & Budget Steering Committee										25			
	Workshop for the preparation of Adjustment Budget	Chief Financial Officer							22						
	Tabling & approval of Adjustment Budget (to be approved before 28 Feb)	Chief Financial Officer								28					

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS

JULY2017 – JUNE 2018

Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	Workshop with Council to finalize: Draft IDP Review Draft Operational & Capital Budget	Executive Mayor Senior Management									23				
	Quarterly meetings of IDP & Budget Steering Committee	Executive Mayor CFO IDP Coordinator Municipal Manager				23			22		12	25			
	Preparation of draft IDP Review document	IDP Coordinator							15						
	Circulation of draft IDP Review document to all directorates for their input & comment	IDP Coordinator									25				
	Tabling of draft IDP Review & Budget to MAYCO	Municipal Manager CFO									31				
	Tabling of draft IDP Review & Budget to Council	Executive Mayor Council									31				
Integration	Submission of tabled draft IDP Review & Budget to the MEC: Local Government, National & Provincial Treasury (Within 10 working days after tabling)	IDP Coordinator CFO										04			

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY2017 – JUNE 2018												
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	Publishing of draft IDP Review & Budget (including proposed tariffs) for perusal and public comment	IDP Coordinator CFO										04			
Consultation	Embarking on a public participation process via public meetings per ward to obtain final input from stakeholders on the tabled draft IDP & Budget	Executive Mayor Councillors Senior Management										25			
	LGMTEC 3 engagement with Provincial & National Sector Departments to obtain input on the draft IDP Review & Budget	Provincial Department of Local Government										22			
	Incorporate notes and comment from MEC: Local Government & Provincial Treasury and DEA&DP on draft IDP Review & Budget	IDP Manager CFO										26			
Approval	Consideration of all submissions made by community subsequent to the public participation process of the draft IDP Review & Budget	IDP Manager CFO											16		
	MAYCO meeting to consider the submissions and, if	Municipal Manager											21		

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY2017 – JUNE 2018												
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	necessary, to adjust the draft IDP and Budget														
	Council workshop on draft IDP Review & Budget prior to adoption	CFO IDP Manager											22		
	Council meeting to adopt the final IDP Review & Annual Budget and the Performance Management measures and targets (At least 30 days before the start of the budget year)	Executive Mayor Municipal Manager Council											27		
	Management workshop to finalize the SDBIP's	Performance and Compliance Officer											02		
	Publish the adopted IDP Review & Budget with all budget related documents and policies on the municipal website	IDP Coordinator CFO											04		
	Submit a copy of the adopted IDP Review & Budget to the MEC: Local Government and Treasury(Within 10 working days after adoption)	IDP Coordinator CFO											04		
Finalization	Advertise a public notice of the adoption of the IDP	IDP Coordinator											04		
	Publish a summary of the IDP and Budget on municipal	IDP Coordinator											04		

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
	website													
	Approval of the Service Delivery & Budget Implementation Plan (SDBIP) (within 28 days of approval of budget)	Executive Mayor												25

TABLE 60: IDP PROCESS

Chapter 2 – Inter-Governmental Relations and Policy Alignment

2.1 Sustainable Development Goals

The Sustainable Development Goals (SDGs), officially known as transforming our world: the 2030 Agenda for Sustainable Development is a set of seventeen aspirational "Global Goals" with 169 targets between them. Spearheaded by the United Nations, through a deliberative process involving its 193 Member States as well as global civil society, the goals are contained in paragraph 54 of United Nations Resolution A/RES/70/1 of 25 September 2015. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.



FIGURE 2: 2016 SUSTAINABLE DEVELOPMENT

1.4.2 The Millennium Developmental Goals



In 2000, 189 nations including South Africa made a promise to free people from extreme poverty and multiple deprivations.

The MDGs focus on three main areas of human development which are encouraging human capital, improving infrastructure and increasing social, economic and political rights. If these goals are achieved, world poverty will be reduced, lives will be saved, and people will have the opportunity to benefit from the global economy.

1.4.3 National Development Plan (NDP) –Vision for 2030

The Vision statement of the National Development Plan (NDP) aims to change the lives of millions of people in South Africa by eliminating poverty and reducing inequality by 2030. The President appointed a National Planning Commission in May 2010 to draft a vision and plan for the country.

On 9 June 2011 the Commission released a diagnostic document and elements of a vision statement. On 11 November 2011 the vision statement and the plan was released for consideration. The Commission consulted widely on the draft plan. The National Development Plan was handed to President Zuma in August 2012 and was adopted by Cabinet in September 2012.



An approach to change is set out depicting a clear link between capabilities, opportunities and employment on social and living conditions. It shows how leadership, an active citizenry and effective government can help drive development in a socially cohesive environment.

The 2030 plan is summarized as follows:

By 2030:

- Eliminate income poverty – Reduce the proportion of households with a monthly income below R419 per person (in 2009 prices) from 39% to zero.
- Reduce inequality – The Gini coefficient should fall from 0.69 to 0.6.

Enabling milestones:

- Increase employment from 13 million in 2010 to 24 million in 2030.
- Raise per capita income from R50 000 in 2010 to R120 000 by 2030.
- Increase the share of national income of the bottom 40% from 6% to 10%.
- Establish a competitive base of infrastructure, human resources and regulatory frameworks.
- Ensure that skilled, technical, professional and managerial posts better reflect the country's racial, gender and disability makeup. Integrated Development Plan for 2017 - 2022 23
- Broaden ownership of assets to historically disadvantaged groups.
- Increase the quality of education so that all children have at least two years of preschool education and all children in grade 3 can read and write.
- Provide affordable access to quality health care while promoting health and wellbeing.
- Establish effective, safe and affordable public transport.
- Produce sufficient energy to support industry at competitive prices, ensuring access for poor households, while reducing carbon emissions per unit of power by about one-third.
- Ensure that all South Africans have access to clean running water in their homes.

- Make high-speed broadband internet universally available at competitive prices.
- Realise a food trade surplus, with one-third produced by small-scale farmers or households.
- Entrench a social security system covering all working people, with social protection for the poor and other groups in need, such as children and people with disabilities.
- Realise a developmental, capable and ethical state that treats citizens with dignity. Ensure that all people live safely, with an independent and fair criminal justice system.
- Broaden social cohesion and unity while redressing the inequities of the past.
- Play a leading role in continental development, economic integration and human rights.

Critical actions:

- A social compact to reduce poverty and inequality, and raise employment and investment.
- A strategy to address poverty and its impacts by broadening access to employment,
- Strengthening the social wage, improving public transport and raising rural incomes.
- Steps by the state to professionalise the public service, strengthen accountability, improve coordination and prosecute corruption.
- Boost private investment in labor-intensive areas, competitiveness and exports, with adjustments to lower the risk of hiring younger workers.
- An education accountability chain, with lines of responsibility from state to classroom.
- Phase in national health insurance, with a focus on upgrading public health facilities,
- Producing more health professionals and reducing the relative cost of private health care.
- Public infrastructure investment at 10% of gross domestic product (GDP) financed through tariffs, public-private partnerships, taxes and loans and focused on transport, energy and water.
- Interventions to ensure environmental sustainability and resilience to future shocks.
- New spatial norms and standards upgrading informal settlements and fixing housing market gaps.
- Reduce crime by strengthening criminal justice and improving community environments.

Government's targets for 2030 are as follows:

1. Create 11 million more jobs by 2030.
2. Expand Infrastructure.
3. Transition to a low-carbon.
4. Transform urban and rural spaces.
5. Education and Training.
6. Provide Quality Health Care.
7. Build Capable State.
8. Fight Corruption.
9. Transformation and Unity.



1.4.4 National Government Outcomes

National Government has agreed on 12 outcomes as a key focus of work. These outcomes have been expanded into high-level outputs and activities, which in turn formed the basis of a series of Performance Agreements between the President and relevant Ministers.

Kannaland Municipality strives toward aligning its Strategic objectives to these 12 outcomes:

Outcome 1: Improve the quality of basic education.

Outcome 2: Improve health and life expectancy.

Outcome 3: All people in South Africa protected and feel safe.

Outcome 4: Decent employment through inclusive growth.

Outcome 5: A skilled and capable workforce to support inclusive growth.

Outcome 6: An efficient, competitive and responsive economic infrastructure network.

Outcome 7: Vibrant, equitable and sustainable rural communities and food security.

Outcome 8: Sustainable human settlements and improved quality of household life.

Outcome 9: A responsive, accountable, effective and efficient local government system.

Outcome 10: Protection and enhancement of environmental assets and natural resources.

Outcome 11: A better South Africa, a better and safer Africa and world.

Outcome 12: A development-orientated public service and inclusive citizenship.

1.4.5 Provincial Government Western Cape - Provincial Strategic Objectives

The Provincial Government of the Western Cape (PGWC) published the Draft Strategic Plan with the title “Delivering the open opportunity society for all”.

This Plan puts forward the following 12 Strategic Objectives:

1. Creating opportunities for growth and jobs
2. Improving education outcomes
3. Increasing access to safe and efficient transport
4. Increasing wellness
5. Increasing safety
6. Developing integrated and sustainable human settlements
7. Mainstreaming sustainability and optimising resource-use efficiency
8. Increasing social cohesion
9. Reducing poverty

10. Intergrading service delivery for maximum impact
11. Creating opportunities for growth and development in rural areas
12. Building the best-run regional government in the world

1.4.6 Eden District Municipality's Strategic Goals

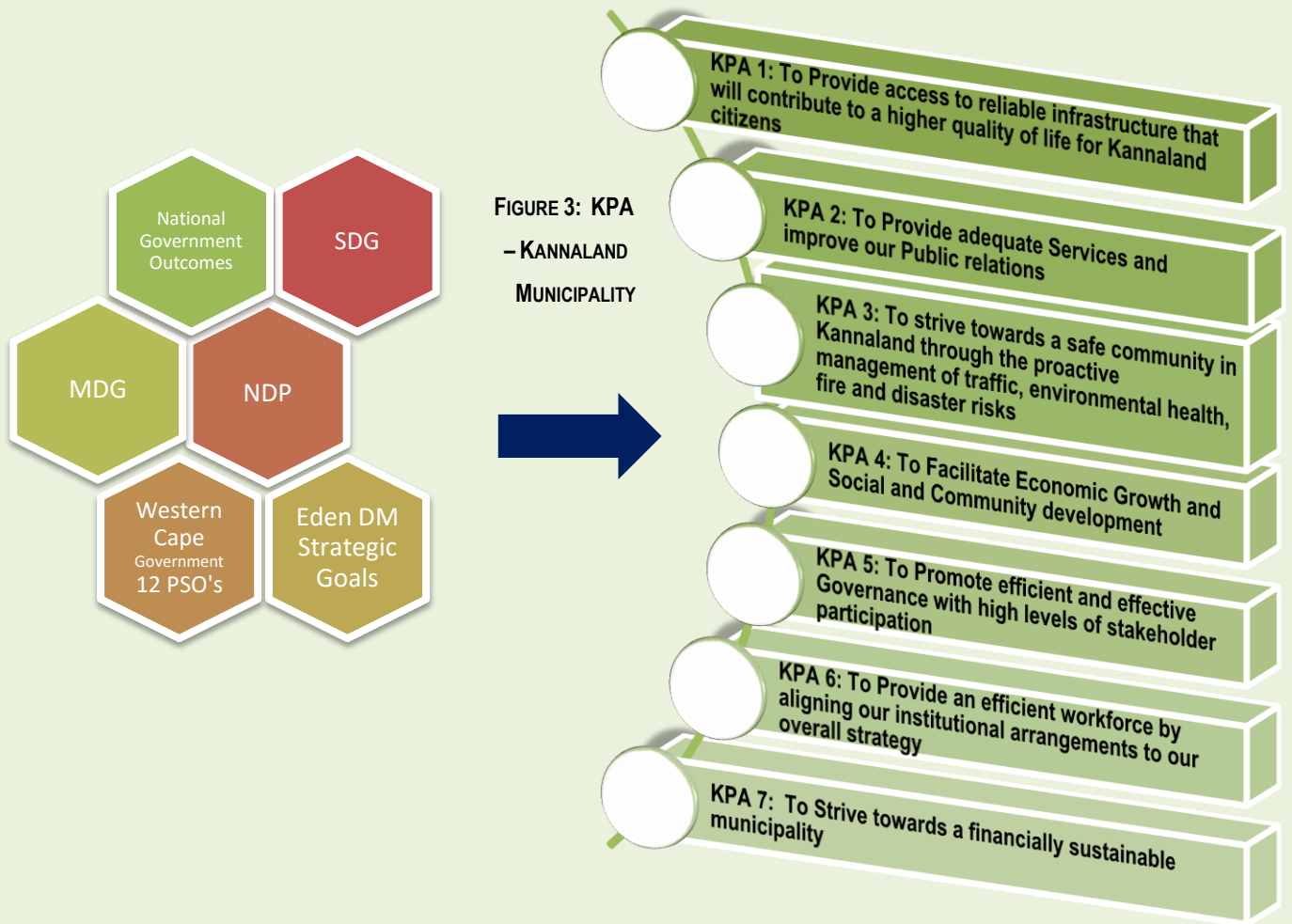
The Eden district Municipality has identified seven (7) strategic goals that are essential for realising their vision and mission and which contribute to the achievement of their long term vision beyond this 5 year IDP. Each of the goals below is supported by several more specific and measurable objectives.

- 1 Healthy and socially stable communities
- 2 Build a capacitated workforce and communities
- 3 Conduct regional bulk infrastructure planning & implement projects, roads maintenance and public transport; manage and develop council fixed assets
- 4 Promote sustainable environmental management and public safety
- 5 Promote good governance
- 6 Ensure financial viability of the Eden District Municipality
- 7 Grow the district economy

1.4.7 Kannaland Municipality's Key Performance Areas (Strategic Objectives)

Kannaland Municipality developed goals, objectives and strategies that are aligned with some of these outcomes however, achieving the outcomes remain a challenge. Effective intergovernmental relations stand in the way of achieving the challenge posed by historical mediocre performance of government departments to achieve outcomes developed on paper. National outcome 9 in particular provides the space for local government to improve its functioning so as to ensure an accountable, responsive, effective and efficient local government system. Achieving outcome 9 will restore the confidence of citizens in the local government sphere as well as improve performance and professionalism and strengthen partnerships between local government, communities and civil society.

Taking into consideration political, national, and provincial and district policies, Kannaland Municipality adopted the following seven (7) Key Performance Area's:



1.4.8 Horizontal Policy Alignment

The table below illustrates the alignment of the strategic objectives of Kannaland Municipality with the objectives of the National Development Plan. The aim is to align programmes/projects which the municipality tends to achieve:

Kannaland Objectives	Eden District Objectives	PSO	NDP Objectives / Outcomes
KPA1: To provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens	Conduct regional bulk infrastructure planning & implement projects, roads maintenance and public transport; manage and develop council fixed assets (3)	Developing integrated and sustainable human settlements (6)	Outcome 6: Efficient, competitive and responsive economic infrastructure network
KPA2: To provide adequate Services and improve our Public relations		Increasing wellness (4) Integrating service delivery for maximum impact (10)	Outcome 2: Improve health and life expectancy
KPA3: To strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks	Promote sustainable environmental management and public safety (4)	Increasing access to safe and efficient transport (3) Increase safety (5)	Outcome 2: Improve health and life expectancy Outcome 3: All people in South Africa protected and feel safe Outcome 7: Vibrant, equitable and sustainable rural communities and food security Outcome 10: Protection and enhancement of environmental assets and natural resources Outcome 11: A better South Africa, a better and safer Africa and world
KPA4: To facilitate Economic Growth and Social and Community development	Grow the district economy (7) Healthy and socially stable	Creating opportunities for growth and jobs (1) Improve education	Outcome 1: Improve the quality of basic education. Outcome 4: Decent

Kannaland Objectives	Eden District Objectives	PSO	NDP Objectives / Outcomes
	communities (1)	outcomes (2) Developing integrated and sustainable human settlements (6) Increasing social cohesion (8) Reducing poverty (9) Creating opportunities for growth and development in rural areas (11)	employment through inclusive growth Outcome 6: Efficient, competitive and responsive economic infrastructure network Outcome 8: Sustainable human settlements and improved quality of household life. Outcome 7: Vibrant, equitable and sustainable rural communities and food security
KPA5: To promote efficient and effective Governance with high levels of stakeholder participation	Promote good governance (5)	Building the best-run regional government in the world (12)	Outcome 9: A responsive and, accountable, effective and efficient local government system Outcome 12: A development-orientated public service and inclusive citizenship
KPA 6: To provide an efficient workforce by aligning our institutional arrangements to our overall strategy	Build a capacitated workforce and communities (2)	Mainstreaming sustainability and optimising resource-use efficiency (7)	Outcome 5: A skilled and capable workforce to support inclusive growth
KPA 7: To strive towards a financially sustainable municipality	Ensure financial viability of the Eden district municipality (6)	Building the best-run regional government in the world (12)	Outcome 9: A responsive and, accountable, effective and efficient local government system

TABLE 1: STRATEGIC ALIGNMENT

1.4.9 Kannaland contribution to the National Development Plan

NDP chapter 3: Economy and development

- ✓ This objective communicates the strategy of implementing the National Government's public works programmes with which Kannaland aligns through the implementation of its Expanded Public Works Programme (EPWP).

NDP chapter 4: Economic infrastructure

- ✓ This objective relates to that which is required to enable economic development such as the provision and sustainability of services such as water, electricity and public transport. To achieve this, the Kannaland Municipality strives towards well maintained water, sanitation, and waste and electricity infrastructure.

NDP chapter 5: Environmental sustainability and resilience

- ✓ This objective also relates to National Government's public employment programmes. Kannaland aligns through the implementation of the Expanded Public Works Programme (EPWP).

NDP chapter 6: Inclusive rural economy

- ✓ The Kannaland Municipality has developed, in partnership with the Provincial Government, an Integrated Rural Development Plan for the Municipality.

NDP chapter 8: Transforming human settlements

- ✓ This objective relates to how municipalities should spatially establish integrated human settlements. The Kannaland responds through the implementation of its HSP.

NDP chapter 9: Improving education, training and innovation

- ✓ This objective at improving childhood development (ECD), and artisans' development. For this planning cycle, Kannaland will support women and child health services, family planning and immunization and targeted ECD programmes.

NDP chapter 10

- ✓ **Healthcare for all:** This objective relates to access to primary healthcare by improving tuberculosis (TB) prevention and cure, reducing maternal, infant and child mortality, and reducing injury, accidents and violence.

NDP chapter 12: Building safer communities

- ✓ This objective relates to the need for all people, especially women and children, to feel safe at home, school and work, free of fear. Kannaland actively supports this through awareness and its Ward Committee system.

NDP chapter 13: Building a capable and developmental state

This objective relates to the state playing a developmental and transformative role. It requires that staff at all levels should be competent, experienced and ability to do their jobs, and that intergovernmental relations should be managed better. Kannaland will use the Workplace Skills Plan to implement a human resources, talent management and skills develop

1.5 Inter-Governmental Cooperation

The municipality fosters relations with other spheres of government and participates in various intergovernmental activities to promote a closer working relationship between the various spheres of government which will certainly act as a catalyst in advancing the agenda to create a stable governance structure, promote financial sustainability and service delivery through infrastructure, housing and other services.

2.2.1 Regional and Provincial platforms

Kannaland Municipality used a number of mechanisms to continuously communicate the processes with the development and when and how the implementation of the IDP operates. These mechanisms are also used for current and future planning to obtain input in developing a strategy for the municipal area. In preparation for this final IDP, the municipality held the following engagements which are a continuous process.

ENGAGEMENTS	
Council Meetings which is open to the public	Bi-Monthly
IDP Indabas 1	Annually
MinMay	Quarterly
MinMay Tech	Quarterly
District Coordinating Forum	Quarterly
MGRO 1 & 2	Annually
Back to Basics Engagements	Quarterly
Human Settlement Engagements	Quarterly
Water and Sanitation Forum	Quarterly
Kannaland Municipality public participation meetings	Quarterly
Provincial and District IDP forums	Quarterly
ICT Managers Forum	Quarterly
SCM Forum	Quarterly
Premiers Coordinating Forum	Quarterly
Council feedback meetings	Quarterly
Zoar Community Integrated platform	As per scheduled by project leaders

TABLE 2: SECTOR ENGAGEMENTS

For this elected term the aim will to enhance intergovernmental relations by mobilizing resources and strategic partnerships which will ensure co-ordination of service delivery by all departments to the citizens to gain a better and healthy quality of life.

The desired outcome of inter-governmental cooperation as previously mentioned is to:

- strengthen good governance;
- addressing the needs of the poor by introducing programs to the community which will boost entrepreneurship skills eg. Food gardening ect.
- coordinate and managing all municipal relationships with other spheres of government;
- ensure that there is a strong link between departments internally and the two spheres of government (National and Provincial);
- facilitate information and knowledge sharing through inter-municipal cooperation (steering committees);
- To build managerial and technical capacity (through study tours, exchange programmes, seminars and conferences);
- To develop project partnerships with other government departments for mutual benefit;
- To create employment through the public works programmes;
- To focus on supporting the successful implementation of the strategic priorities;
- To ensure that there is monitoring and alignment of municipal budgets and IDP implementation with provincial and national government departments;
- Coordinating and aligning all events that involve other spheres of government – e.g. national days, Imbizo's, etc.
- Promoting efficient lines of communication and between the municipality and other spheres of government;

2.2.2 Public Participation sessions

A key characteristic of this 2017-2022 IDP review process is that it is a people-driven process. It is informed by -community based planning which resulted in prioritising the needs of the community; an analysis of the current status of service delivery and the environment; and various stakeholder engagements.

The municipality has clearly demonstrated its effort to promote participative democracy in the developing of its by-laws, planning applications as well as other planning processes

The purpose of this initial round of public participation was:

- To discuss the process to be followed for the outer financial years
- To consult on the content for the IDP review and what components of the IDP should be reviewed
- Identify the current needs per ward and how the prioritisation will take place

The socio-economic conditions and character of the four towns of Kannaland and settlements are distinctly different, resulting in their expectations from the budget and service delivery priorities being diverse. This variety and service delivery backlogs in some areas were duly considered in the IDP Review. The public participation process was characterized by active participation by all sectors of society and again highlighted the fact that the expectations from communities are very high in terms of service delivery, infrastructure development and other development challenges considering the limited resources available to the municipality.

Effective partnerships with communities, other spheres of government and the private sector are essential to deliver on this expectation adequately. The input received from the various stakeholders during the IDP review process, were refined and duly incorporated into this document with the sole intention to inform the budget and other development priorities of the municipality. Some of the participants got the opportunity to identify solutions for the challenges to ensure that they take responsibility of their own development.

Furthermore a great portion of the community also raised a number of issues that were not necessarily competencies of local government and those will be referred to the respective government departments via the IDP Indaba and other relevant IGR structures.

Ward Committees have been established in all 4 wards of the Kannaland Municipal Area. These ward committees comprise geographical as well as sector representatives in communities and are regarded as the statutory consultative forums in the public participation process of the IDP review. The respective ward councillor is automatically the chairperson of the ward committee and quarterly meetings keep the community informed of all municipal related matters. It is also obligatory on ward committee members to regularly interact with their communities and ensure maximum participation in all planning processes of Kannaland Municipality.

The ward committees played a significant role in this round of IDP review to ensure that the broader public participates and also prioritised the basic needs and development requirements in the different wards. This final review of the 4th Generation IDP, revealed that priority needs of the community

mostly center on basic services such as housing, electricity, water, sanitation, job creation, unemployment and poverty.

These engagements certainly enlighten the importance of the ward committee members role and responsibility as well to enhance accountability to the areas they represent in their respective wards. Ward Committee members had comprehensive training in respect of the IDP and budget processes and will certainly be more equipped to make meaningful input and ensure that the priority issues of communities are reflected in the IDP and Budget.

Representatives from sectors which are not necessarily represented on the ward committees are also invited to the prioritization workshops to ensure that the interest of their sectors is duly considered.

The Kannaland Municipality has established a ward committee system which will be actively involved in the mobilising process as well the IDP and budget related processes for the next reviews. In the following wards depicted below in the table for the 2017-2022 financial term:

Ward 1 Ladismith: Nissenville		Ward 2: Calitzdorp	
Ms. Elizabeth Jacobs		Ms. Emilene Hess	
Ms. Carol Hendricks		Ms. Fransiena Quantini	
Past. Melanie Ayslie		Mr Mike Neebe	
Past. Hendrik Rademeyer		Mr Moos Arnoldus	
Mrs. Surina Jafta		Mr Monolito Pieterse	
Mr Johannes Ruiters		Mrs Bettie Mcolillon	
Ms. Gloria Douwries		Mrs. Quinta Valentyn	
Ms. Brumilda Januarie		Mr Andrew Baartman	
Mrs. Hilda van Eick		Mrs Sophia Roman	
Mr. Dawid Rooi		Mr Gert Uithaler	
Mr. J Cedras (will be co-opt in case of a vacant position)			
Ward 3: Zoar		Ward 4: Ladismith / Van Wyksdorp	
Mr. Tsodinyane Jacob Nkokou		Vacant	
Mr. Lionel Rose		Mr Jonathan Jantjies	
Mrs. Christal Johannes		Mrs Regina Carolus	

Ms Manoline Willemse	Mrs Nerina Lochner
Mr Eugene Ludick	Mrs Maria Herdien
Mr. Allister Reizenberg	Mr Ettiene Nolte
Ms. Elize Booyesen	Mr Edward Adcock
Ms. Carol Hess	Ds J Frans
Ms. Rina Hector	Mrs. Elsa le Grange
Mrs. Diane Hardien	Mr Ivan Januarie

TABLE 3: WARD COMMITTEE MEMBERS

2.2.3 Public Needs Analysis

Throughout the stakeholder meetings, public hearings and other interactions, various needs were identified and will be clustered below in the form of the Key performance areas *(please note the presentation (ward 3) for more detailed public needs which were identified)*:

KPA	REQUESTS	WARD
Infrastructure and Basic Service Delivery	Repairs & Maintenance included requests for the upgrades of roads, rehabilitation of community facilities like halls and parks, fixing of potholes, building of speed humps, attending to sewage blockages, repairing of burst water pipes, repairs to RDP houses where roofs are leaking	1,2,3,4
	Requests for roads predominantly centred around the building of new roads, link roads, access roads, and tarred roads where there have never been roads constructed before	1,2,3,4
	Renewable energy supplies needs to be considered, including but not limited to: solar, wind, and hydro power	3,4
	Request for halls and community centres focussed on the construction of new halls and community centres, which are multi-purpose in nature, in order to enhance community development through social cohesion.	3,4
	Housing requests include the request for RDP houses and houses in general.	1,2,3,4
	Upgrading or new construction of old infrastructure (water, sanitation and electricity)	
	Ensuring proper lighting be placed in order to reduce crime	3,4
	Current and new establishment of sport fields – netball, rugby, hockey and soccer fields	1,2,3,4
	Ensuring all informal settlement areas be equipped with basic services	1,2,3,4

	Multi-Purpose Centre in Zoar and Calitzdorp	
	Implementation of Advanced Waste Management Systems that reflect community values around waste minimisation.	1,4
	Recovery, re-use and recycling of waste is maximised. The volume of waste disposed to landfill is minimised. Life spans of landfill sites are extended.	1,4
Local Economic Development	Seamless movement of people, goods, and services in and around the town	1,2,3,4
	Community must be supported with programs for self-empowerment and job creation projects for example Guest houses	
	Economic growth leading to the creation of decent jobs.	1,2,3,4
	People connect virtually through high-speed information and communication technology.	2,4
	Reliable telecommunications networks provide access to learning and information opportunities in homes, schools, and workplaces.	
	Business and industry embrace high-speed broadband networks to become more productive and innovative. Energy efficiency is promoted by telecommuting.	
Good Governance	Communities wanted to be informed about the IDP process, to be involved in the budget process, for ward committees to be established, for the Municipality to strengthen relationships between communities and their councillors.	3,4
	It also included the issue of youth development, job creation, training and skills development, small business establishment, building of libraries, & other aspects in order to strengthen the economy.	
Safe environment	Foot bridge in Zoar – Current sports field	3
	Establishment of speed cameras in all four towns	1,2,3,4
	Three way stop at the entrance of Calitzdorp	2
	Law enforcement be strengthen in all four towns	2
	Taxi rank with toilets in Calitzdorp	2
	Medical centre for Van Wyksdorp and Zoar	3,4
	- Current medical facility in Calitzdorp be expanded - Current clinic in Ladismith be expanded and a new clinic be built in central Ladismith	
	Social infrastructure supports healthy lifestyles, learning opportunities, and community unity and social cohesion. Health infrastructure is readily available and meets community needs.	1,2,3,4

Financial Viability	Major recreational infrastructure (eg. sports stadium, cultural facilities, etc.)	
	Urban renewal and greening is recognised by communities and the business group as contributing to environmental and ecological sustainability, as well as supporting future residential, commercial, and industrial development	4
	Tree planting and paving of street blocks	
	Training or replacement programme for incumbent to do the municipal accounts and enquiries	1,2,3,4
	Re-look the tariffs on the current budget	1,2,3,4
	Needs to budget for repairs and maintenance more and not on sportsfields (that can be done once the basics is covered)	

Below is the main key issues which were communicated to us at the public meetings, relevant stakeholder meetings per ward:

WARDS	CONCERNS
Ward 1	There is a shortage of proper traffic calming measure motoring
	Lightning at the entrance of Sakkies Baai and dark areas – High mass lights
	The need for recreational facilities for tourists and the community of Kannaland
	Promote our small business to establish tourism activities in Ward 1 – guest houses and back packers, resident routing
	Opportune the youth and informal business owners to register as a proper business and to transfer skills to others
	Investigate the housing (GAP) to be finalized as per the HSP
	Paving of the internal roads of Nissenville and informal areas with storm water services as well planting trees.
	The CWP must be managed better. All the workers cannot just pick up garbage.
	Establishment of youth centre in Nissenville
	The need for proper lightning in informal areas.
Ward 2	Establishment of more recreational parks in Nissenville – Identified open land
	Paving of the Bergsig area roads
	Promoting the youth through development programmes – youth cafes
	Promote tourism in the area – Assisting the tourism offices with needs as per requested
	Helping the tourism bureau with financial support – festivals and campaigns
	Ensure that law enforcement be implemented in Calitzdorp
	The current medical facility needs to be expanded and clustered into groups (health)

WARDS	CONCERNS
Ward 3	A big tourism board needs to be placed at the entrance and exit of Calitzdorp to indicate all the activities and attractions.
	Mobile medical care needs to be mobilise to rural areas (farms) more efficiently
	The DOH needs to consider to place more medical staff at the current facility.
	There is a critical shortage of land for small farming initiatives (crops and livestock),
	The future use of under-utilized commonages and the need for an Agricultural Strategy,
	The leadership must lead responsibly, be certain that enough is being done and that development is in fact taking place,
	The transformation of Amalienstein farm and surrounding Zoar needs to be fast tracked
	Assets being acquired for the Ward,
	Fast tracking of the building of a Model C school (centralized)
	Strengthen the partnership with SAPS to create a more safe and clean town – Neighbouring watch needs to be placed in Zoar
	Establishing a FAS centre in Zoar
	The community of Zoar needs to more technological connected – By establishing youth café's
	Skilling and capacitating the Youth, as opposed to the use of Consultants,
	Critical intervention is required for the Ward's cemeteries – it must be clearly indicated where the cemetery is located and road signs be placed at the entrance of the area.
	Stringent measures to curb the illegal littering and dumping were required,
	A new Clinic with extended health services was a critical need,
	Ablution and other facilities had to be provided at the new sports field, Abandoned and vandalized buildings are a serious health and safety hazard, as are the overgrown open spaces – harbouring criminal elements and allegedly used for satanic rituals; the Municipality must obtain an order to have them demolished and overgrown areas must be cleared to improve safety of pedestrians,
	Recreational activities needs to be introduced
	Housing and water quality needs to be re-looked urgently
	The water storage capacity problem needs to be attended to by building a dam (drinking and irrigation water)

WARDS	CONCERNS
Ward 4	Paving of internal roads: ✓ Protea Park – A paved circle needs to be placed at 5th avenue where it links to 9th avenue ✓ Paving of the entire Protea Park and the part of Braklaagte with the following streets: • Malva Street • Gousblom Avenue • Daisy Avenue • Vygie Avenue • Bloekomlaan
	Indigent support be provided to residents in Van Wyksdorp
	Proper lighting throughout the entire town • Entrance from the R62 needs to be equipped with lighting as accidents volume is high on the road
	Entrance from the R62 up an till VWD needs to be tarred
	SDF needs to be refined as VWD has a vast area for tourism and business expansion which create job opportunities
	Municipal accounts needs to be re-looked and investigated and properly communicated to the community
	Lightning in surrounded farms is inadequate as well the road conditions
	The municipality needs to do an assessment which included the owners of the land on the R62, wine vineyards ect to consider attraction points for tourists as well enhancement of income and job opportunities
	The tourism master plan/strategy needs to be in place
	Roads needs to be upgraded and proper management and maintenance be put in place • High volume as well low volume needs to be identified where to pave and tarred and the trucks needs to be informed where to drive or not (via weighbridge)
	Air quality management needs to be managed more frequently with regards to pollution
	The hiking trails: Die liggie, towerkop and waterkloof area needs to be cleaned up and properly managed
	The caravan park needs to be re-developed in a housing complex or tourist attraction and be management more strictly.

WARDS	CONCERNS
	Consider to sell or lease old buildings (In die Bos area) for the development of an auto motor business
	The municipality needs to partner with the community in a clean our town campaign
	The waterkloof route needs be kept clean as well the maintenance of the “Die Liggie” hiking trail.
	Land to be identified for Recreational parks in Town. The caravan park needs to be upgraded and better managed.

TABLE 4: IDP PRIORITIES

Generic needs for all four ward were:

- Maintenance of infrastructure and proper supervision of workers and the quality of their work had to be stepped up,
- It was suggested that the Municipality utilize the EPWP for starting a campaign throughout Kannaland – Keep our Town clean,
- Sport & Recreation Facilities could also be linked to EPWP, or applications for Lotto funding – specifically for the purpose of Youth Development,
- The EPWP and CWP should be re-launched so that the general public could have a clearer understanding of the concept and process; these programmes should also be linked to the Integrated Waste Management of the Municipality,
- More regular meetings must be held in the Ward and communication to be improved,
- Response time to complaints required improvement; the prepaid electricity vending station issue must be resolved,
- Some public toilets in town were not being managed properly (this was problematic for pension and grant beneficiaries, who have to spend long hours on pay-days),
- Local Economic Development (LED) and Special Programmes needs to be stepped up,
- Food Security projects should be supported; land and water to be provided for this purpose,
- The Ward Development Priorities be reprioritized, with regards to Roads & Storm water, upgrading of ageing and ailing Infrastructure, and then Waste Management (including the implementation of more stringent measures to address the illegal dumping and littering).
- Steps must be taken to improve the Ward’s economic participation.

Chapter 3 – Municipal Socio Economic Profile

3.1 Contextualize Analysis



Kannaland Local Municipality is a Category B Municipality situated in the Western Cape Province, 325 kilometres from Cape Town. The municipality covers an area of 4, 758 square kilometres in the Little Karoo, stretching from the Swartberg in the north to the Langeberg in the south, and from the Anysberg in the west to the Gamkaberg in the east. It is

drained by the Groot River and the Gourits River. It borders on the Kannaland and Prince Albert municipalities to the north, the Oudtshoorn Municipality to the east, the Hessequa Municipality to the south and the Swellendam and Langeberg Municipalities to the west.

According to the 2015 Socio-Economic analysis of the municipality has a population of 25, 094 people in 6, 749 households. The 2011 Census reported that 84.6 per cent describe themselves as "Coloured", 9.9 per cent as "White", and 4.7 per cent as "Black African". The first language of 95.4 per cent of the population is Afrikaans, while 2.5 per cent speak English.

The largest town and also the location of the municipal headquarters is Ladismith, which as of 2011 has a population of 7, 127. Ladismith is at the foot of the Swartberg Mountains, as is Zoar (population 4, 659) and Calitzdorp (population 4, 284) to the east. Vanwyksdorp (population 833) is further south in the valley of the Groot River.

The Kannaland Local Municipality is situated within the Eden District Municipality which lies in the Western Cape Province. The main urban areas within the Kannaland Municipality are:



Ladismith: The town is the main urban centre of the municipality. The town serves as an agricultural service centre for the surrounding agricultural areas. Ladismith Cheese and Parmalat, two dairy factories, are amongst the most prominent industries in the town. The town is located below the Swartberg

Mountains in the central Northern parts of the Kannaland Municipality along the R62.

Calitzdorp: Calitzdorp is an agricultural service centre serving the needs of the surrounding agricultural areas. The town is known as the “Port wine capital” of South Africa. Tourism plays a significant role mainly due to the town’s location on the R62 tourism route. The town is located in the central eastern parts of the municipality.



Zoar: Zoar, originally a mission station, is a dispersed rural settlement. The town is located between Ladismith and Calitzdorp on the R62. Large sections of land are proclaimed in terms of The Rural Areas Act (Act 9 of 1987) and have remained undeveloped. Amalienstein forms part of Zoar and was established as a Lutheran Mission Station. Development here comprises of a restored church building, historical graveyard and farm buildings.

Van Wyksdorp: Van Wyksdorp is a small and isolated rural village situated along the R327 in the south of the Kannaland Municipality. The town is popular among residents for its rural character.



Hoeko: Hoeko is situated approximately 15km east of Ladismith and is a rural settlement. CJ Langenhoven, a famous South Africa writer, most famous for composing the South African Anthem “Die Stem”, was born here in 1873. The town has some tourism significance (i.e. a water monument) and is known for the production of apricots.

3.2 Trends

When considering the global context within which South African municipalities functions, trends show that the major drivers of economic growth in the next 15 years will be in larger towns and mid-size cities. Effective planning and policies are needed for to plan for this growth to ensure that urbanisation and economic development to complement each other.

There is remarkable potential for growth in South Africa and the Western Cape in particular. Kannaland is ideally located to be the central hub for growth in the Klein-Karoo, especially in respect of agriculture processing and regional agricultural services wishing to expand to this region. In an increasingly competitive world, the only way Kannaland will be able to share in exponential growth from neighbouring regions is by building on its strengths, and ensuring it does not misappropriate resources in support of investments that will not be competitive into the future.

With respect to global challenges such as global warming and climate change, Kannaland can also play a role with adaptation and mitigation strategies, to meeting global environmental quality goals (such as reducing carbon emissions).

Kannaland is an important location of opportunity; where people can come to access a better life, including shelter, services, health, education, leisure, interaction with diverse cultures, intellectual stimulation and personal growth, and for developing a sense of belonging.

The Kannaland Municipality strives to be welcoming to all people. Residents should feel at home and feel that the Municipality provides for a friendly enabling environment to access opportunities.

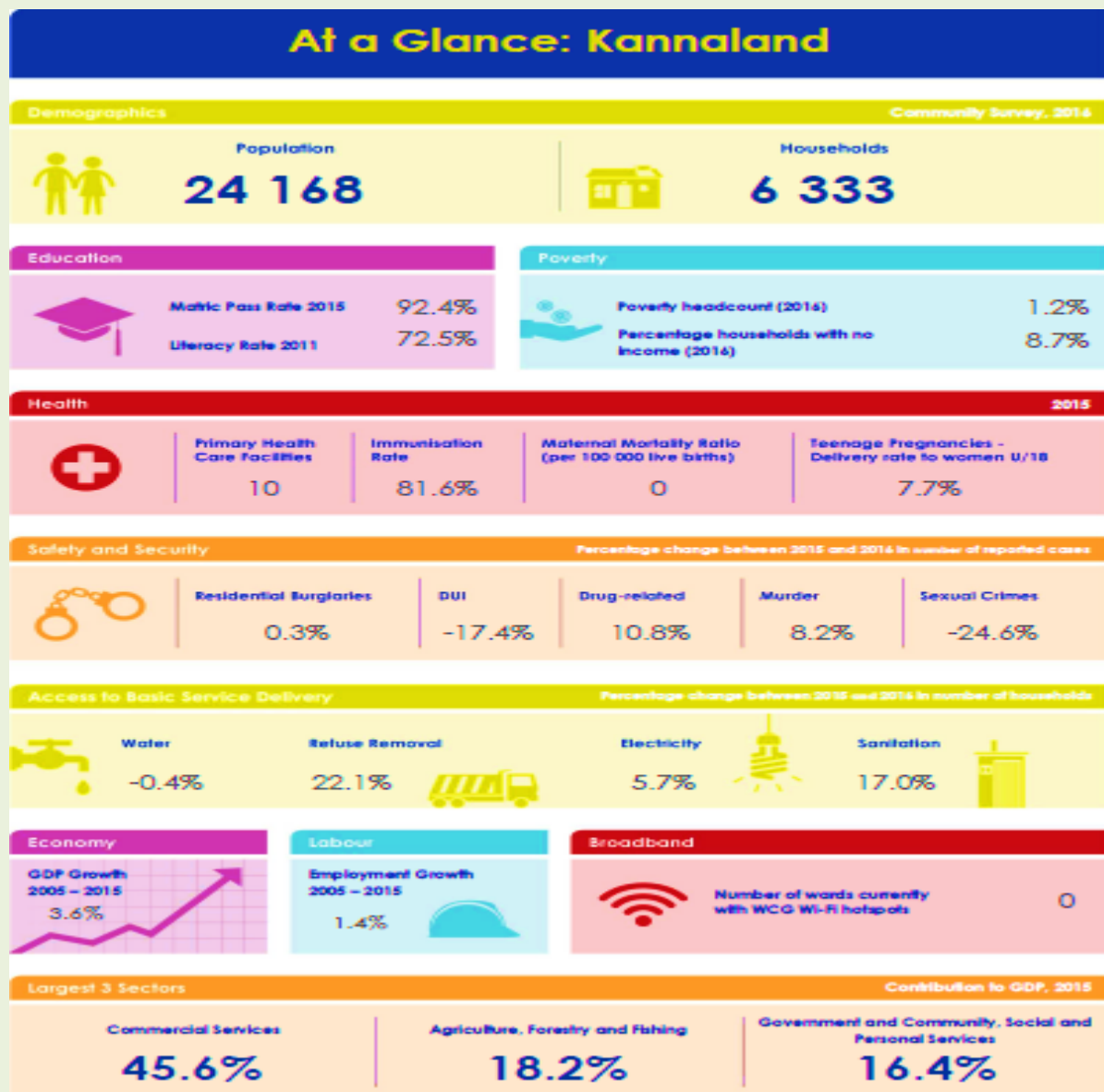
This is especially the case for those who are most in need of assistance. The Municipality will continue to invest in infrastructure to provide capacity to support development. As the Municipality expands, business and residents has to be supported by adequate services, electricity, water and other amenities as well as technology such as broadband and public transport networks.

The investment in infrastructure should encourage and lead growth by ensuring that the supporting capacity for people to build opportunities is in place.

Over the next five years, the Municipality will invest in a number of infrastructure projects to improve service delivery. The Municipality has a large population of indigent households especially in the more rural towns and will continue to maintain rates rebates policy for people qualifying as indigents, to provide a measure of poverty alleviation. The direct effect on all communities will be through the provision of amenities, such as parks, libraries, sports and recreational facilities, and community and youth centres.

The Municipality will take all necessary measures to ensure effective environmental health through noise control, monitoring air pollution, managing waste, hygiene inspections, and water quality control and management.

3.3 Kannaland at a Glance



3.3.1 Educational Levels

Educational facilities are largely clustered around the settlements of Ladismith, Calitzdorp, Van Wyksdorp and Zoar. No educational facilities are available in Anysberg and Plathuis in the West and in Kraaldorings, Badshoogte and Vleirivier in the Eastern parts of the municipality.

According to the Western Cape Education Department (WCED) 39.4 per cent of students that were in Grade 10 in 2013 dropped out of school by the time they reached Grade 12 in 2015. This is a

particularly concerning trend given the ever increasing demand for skilled and highly skilled labour within the region. The average learner-teacher ratio in Kannaland has increased from 25.3 per cent in 2012 to 27.7 per cent in 2014.



The availability of adequate education facilities such as schools, FET colleges and schools equipped with libraries and media centres could have a positive influence on academic outcomes. Kannaland have 18 schools in 2015 which had to accommodate 4 671 learners. The proportion of no fee schools has increased significantly from 77.7 per cent in 2012 to 94.4 per cent in 2014, indicating that given the challenging economic climate, there is an effort to alleviate severe funding pressure of parents and guardians that are unable to afford school fees. With the challenge of disadvantage areas it makes it impossible to uphold the funding requirements and places the school under pressure or make it unable to contribute to school subsidies.

Due to the financial constraints of households, the dropout rate of students increases, the WCED offered certain fee-paying schools the option of becoming no fee schools. The majority of the schools in Kannaland are registered with the WCED as no fee schools.

	2011
No schooling	1115
Some primary	7550
Completed primary	2033
Some secondary	7312
Grade 12	3016
Higher	656

TABLE 5: EDUCATION LEVELS CENSUS 2011

3.3.3.1 Educational facilities

The availability of adequate education facilities such as schools, FET colleges and schools equipped with libraries and media centres could affect academic outcomes positively.

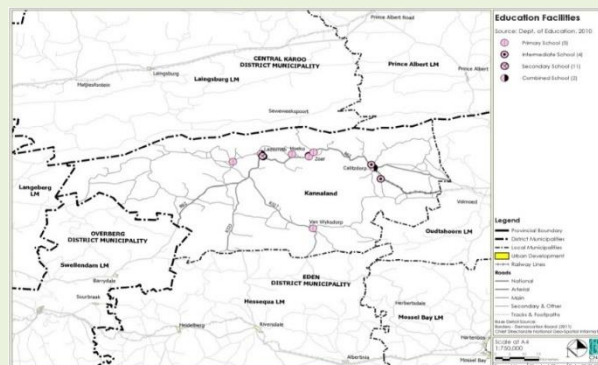
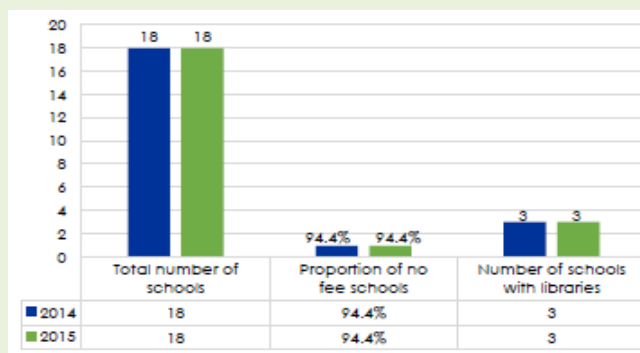


Figure 18: Education facilities – as indicated in SDF figure 3.3.3.1

In 2015, there were 18 public schools in Kannaland which had to accommodate 4671 learners at the start of 2015.



3.3.3.2 Education outcomes

Education remains one of the key issues to improve the local economy therefore it is used to mitigate most of the challenges faced in life. The knowledge that is attained through education helps open doors to a lot of opportunities for better prospects in career growth. According to the economic profile 2016 the matric outcomes remain constantly above 85% between 2013 and 2015 with a pass rate of 92, 4% in 2015.

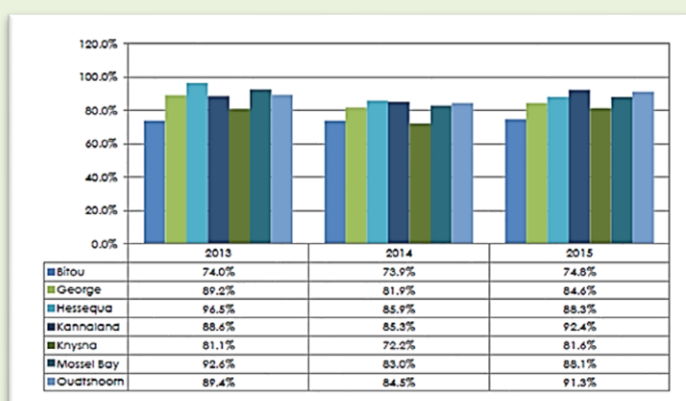


FIGURE 4: KSEP: EDUCATION OUTCOME

3.3.4 Employment and Unemployment

The table indicates that there has been a slight increase in the labour force between 1996 and 2011. The labour force participation rate also decreased between 1996 and 2001 and then decreased to approximately 48% in 2011. This indicates that less than half of the total work force between the ages of 15 and 65 are employed or actively seeking employment.

	Total Population aged 15 - 65	Labour force	LFPR%	Employed	Unemployed	Unemployment rate (%)
1996	11909	7405	62.2	6344	1061	14.3
2001	14622	7365	50.4	6345	1020	13.8
2011	15728	7587	48.2	6271	1316	17.3

TABLE 6: EMPLOYMENT AND UNEMPLOYMENT CENSUS 2001/2011

According the Mero 2016, this is the sectors that contributed the most to Kannaland's employment in 2015.

FIGURE 5: MUNICIPAL ECONOMIC REVIEW AND OUTLOOK (MERO), 2016: QUANTEC RESEARCH, 2016

Sector	Contribution to employment (%) 2015	Number of jobs 2015	Employment (net change)			
			Trend 2004 - 2015	Pre-recession 2004 - 2008	Recession 2008 - 2009	Recovery 2009 - 2015
Agriculture, forestry and fishing	3.4	243	-2 558	-1 820	-285	-453
Mining and quarrying	0.0	0	0	0	0	0
Manufacturing	6.6	475	-172	-55	-51	-66
Electricity, gas and water	0.6	40	17	9	-2	10
Construction	9.6	694	356	182	-27	201
Wholesale and retail trade, catering and accommodation	29.7	2 145	1 003	664	26	313
Transport, storage and communication	8.5	611	432	228	23	181
Finance, insurance, real estate and business services	15.3	1 103	634	339	10	285
Community, social and personal services	17.2	1243	454	228	21	205
General government	9.2	668	83	25	9	49
Total Kannaland	100	7 222	249	-200	-276	725

3.3.5 Health

There are four clinics, five satellite clinics, with mobile health routes and one district hospital servicing the municipal area. The clinic in Ladismith will be relocated to a more central location in Van Riebeeck Street opposite Parmalat. Good health is vital to achieving and maintaining a high quality of life to the citizens of Kannaland. A diverse range of factors play a role in ensuring the good health of communities and that disease, especially preventable and contagious/communicable ones, are kept at bay. Some of the factors include lifestyle features that depend on the provision of high quality municipal services, such as

Municipality	Number of PHC clinics - fixed	Number of PHC clinics - non-fixed (mobile/satellite)	Community Health centres	Community Day centres	Total number of PHC facilities (fixed clinics, CHCs and CDCs, excluding non-fixed)	Number of district hospitals	Number of regional hospitals	Emergency medical services: Number of operational ambulances per 100 000 population
Eden District	38	35	0	7	80	6	1	0.50
Kannaland	4	5	0	0	9	1	0	1.17
Hessequa	4	5	0	0	9	1	0	0.92
Mossel Bay	3	11	0	1	15	1	0	0.32
George	10	6	0	3	19	1	1	0.45
Oudtshoorn	8	3	0	1	12	1	0	0.40
Bitou	4	2	0	1	7	0	0	0.39
Knysna	5	3	0	1	9	1	0	0.56

clean water, sanitation and the removal of solid waste. Access to healthcare facilities is directly dependent on the number and spread of facilities within a geographic space. During numerous community consultations it has occurred that there is a strong need for a centralised clinic in Zoar as well permanent doctors in Zoar and Calitzdorp. The current medical facility in Calitzdorp needs to be expanded.

3.3.5.1 Emergency medical services

Only two operational ambulances are in Kannaland. The relevant low number of operational ambulances in Kannaland makes it difficult in some medical cases on rural areas with regards to saving lives and attending to urgent medical care.

3.3.5.2 HIV/AIDS and Tuberculosis (TB)

Although treatment and care is essential in the management of HIV and AIDS, the need for and importance of preventative care cannot be over-emphasised, especially since to date, there is no known cure. According to the data in the KSEP, by the end of March 2016 a total of 99 ARV's was treated to patients.

Municipality	HIV - Antiretroviral treatment					Tuberculosis			
	ART patient load March 2013	ART patient load March 2014	ART patient load March 2015	Mother-to-child transmission rate	Number of ART clinics/ treatment sites 2015	Number of TB patients 2012/13	Number of TB patients 2013/14	Number of TB patients 2014/15	Number of TB clinics/ treatment sites 2015
Eden District	10 402	12 788	14 805	1.6%	64	4 825	4 909	4 935	83
Kannaland	100	273	260	0.0%	5	221	258	206	7
Hessequa	364	482	552	6.9%	5	343	333	291	9
Mossel Bay	2 117	2 490	2 966	0.6%	17	823	853	761	15
George	3 886	4 534	5 461	2.0%	18	1 730	1 742	1 807	24
Oudtshoorn	740	1 109	1 239	1.3%	6	774	893	911	12
Bitou	1 578	1 640	1 837	0.8%	7	443	344	395	6
Knysna	1 617	2 260	2 490	1.6%	6	491	486	564	10

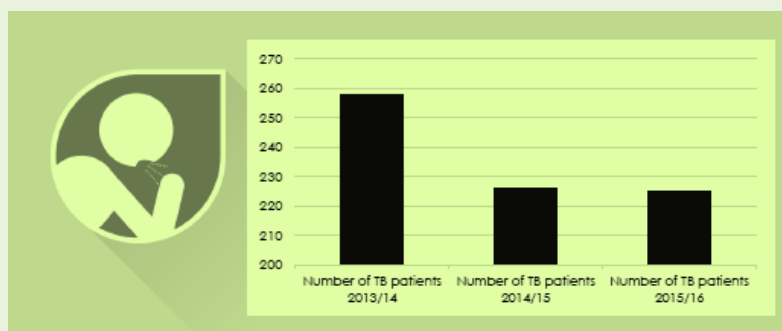
FIGURE 6: HIV/AIDS - KSEP 2016

At the end of June 2011, the Province highlighted that anti-retroviral treatment (ART) was provided to over 100 000 persons in the Province, 7 847 of whom were in the Eden District and 14 in Kannaland. By the end of March 2015, Kannaland's patient load had increased to 260, with treatment being administered from 5 treatment sites.

In addition to improving the quality of life of the patient, anti-retroviral treatment to mothers both before and at birth, also decreases the chances that infants will contract HIV from their mothers. In 2014/15, Kannaland had a zero mother to child transmission rate. Kannaland's rate is therefore significantly below the 1.6 per cent District rate, and the Provincial medium term annual target of 1.4 per cent for 2015/16 and 2016/17.

The TB patient load in the Eden District stood at 4 935 in 2014/15, with treatment being administered from 83 clinics/treatment sites. Kannaland's patient load dropped to 206 in 2014/15 from 258 in 2013/14, with treatment being administered from 7 clinics/treatment sites.

FIGURE 7: TB - KSEP 2016



3.3.5.3 Child Healthcare

Infectious diseases:

Low immunisation rates speak to the need for parents to understand the critical importance of immunisation, as well as the need to encourage parents to have their young children immunised. The full immunization coverage rate for the Eden District was 85 per cent (the highest among the District municipalities) in 2014/15. Kannaland's coverage rate of 84 per cent is slightly lower than that of the District. The Provincial average is 90 per cent.

Malnutrition:

Malnutrition (either under- or over nutrition) refers to the condition whereby an individual does not receive adequate amounts or receives excessive amounts of nutrients. The number of malnourished children under five years in the Eden District in 2015 was 3.79 per 100 000, which was the 2nd highest incidence in the Province after the Central Karoo District.

Neonatal mortality rate:

The first 28 days of life - the neonatal period - represent the most vulnerable time for a child's survival. Kannaland's neonatal mortality rate of 14.2 is higher than the District and Provincial averages of 7.2 and 6.2 per 1 000 live births respectively, and is also much higher than the Province's target of limiting deaths to 6 or less per 1 000 live births by 2019.

Low birth weight:

Low birth weight is defined as weight at birth of less than 2 500 g.

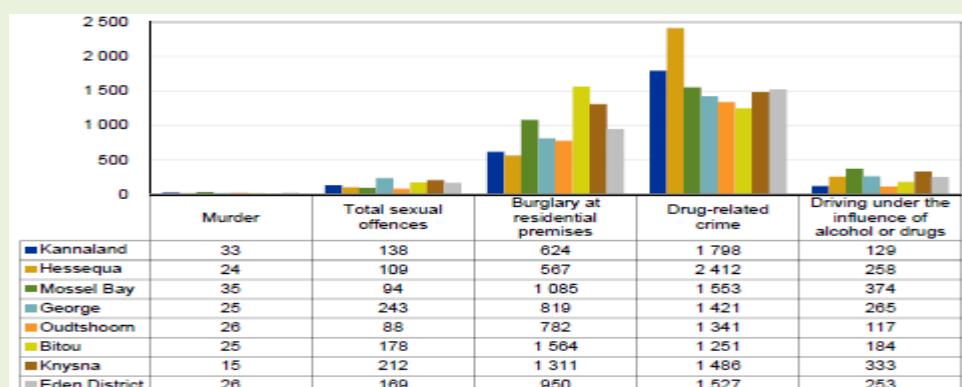
Municipality	Child health				Maternal health		
	Full immunisation coverage under 1 year	Severely malnutrition rate under 5 years	Neonatal mortality rate	Low birth weight	Maternal mortality ratio	Delivery rate to women under 18 years	Termination of pregnancy rate
Kannaland	84%	3.51	14.2	23%	0.0	8.8%	0.0%
Hessequa	81%	0.99	5.6	17%	0.0	11.3%	0.1%
Mossel Bay	91%	4.69	9.5	13%	0.0	6.6%	9.5%
George	88%	2.40	8.7	19%	109.0	6.5%	12.6%
Oudtshoorn	84%	9.78	8.5	18%	56.7	9.6%	2.0%
Bitou	80%	0.46	0.0	0%	0.0	0.0%	0.0%
Knysna	78%	2.47	0.6	12%	58.3	6.4%	10.7%
Eden District	85%	3.79	7.2	16%	62.9	7.4%	7.4%
Western Cape	90%	2.43	6.2	15%	55.4	6.1%	16.8%

**FIGURE 8: WESTERN CAPE
DEPARTMENT OF HEALTH, 2015**

3.3.6 Safety and Security

The extent of crime in South Africa does however not only have a significant impact on the livelihood of citizens, but also affects the general economy. Crime hampers growth and discourages investment and capital accumulation. If not addressed with seriousness, it has the potential to derail both social and economic prosperity.

Below is the crime statistics per 100 000



**FIGURE 9: QUANTEC
RESEARCH 2015**

3.3.7 Basic services provided in Kannaland

3.3.7.1 Indigent support

Municipalities offer additional support through its indigent policy. The indigent policy provides free or discounted rates on basic services such as water, electricity, sanitation, refuse removal and also on property rates.

3.3.7.2 Access to water

Household access to water in the Municipal area has improved considerably between 2011 and 2017.

Regional area	Piped water inside dwelling	Piped water inside yard	Piped water less than 200 m from dwelling	Piped water more than 200 m from dwelling	Borehole/ rain-water tank/well	Dam/river stream/spring	Water-carrier tanker/water vendor	Other/ Unspecified
Western Cape	74.1	13.8	8.7	2.5	0.1	0.1	0.1	0.6
Eden District	71.5	16.8	6.9	2.6	0.7	0.5	0.3	0.7
Kannaland	76.2	15.1	3.0	1.3	0.8	1.8	0.9	1.1

FIGURE 10: ACCESS TO WATER - MERO 2016

The data indicates that in Kannaland, 76.2 per cent of households have access to water within their dwellings and a further 15.1 per cent have access within their yard. The minimum service level is households that have access to water 200 m or less from their dwelling. Approximately 94.3 per cent of households meet this minimum standard. This puts Kannaland close to the NDP target of 100 per cent access to water by 2030. Kannaland's level of access to water is slightly below the Provincial and District averages of 96.6 and 95.2 per cent respectively. This entails that there is room for improvement in terms of household access to water within their homes.

3.3.7.3 Access to sanitation



In 2014, 73.6 per cent of households in Kannaland had access to flush toilets (connected to sewerage/septic tank), which is below the District average of 84.5 per cent. There is however a concern that a total of 17.9 per cent of households still relied on the bucket/pit latrine system.

Municipality	Flush or chemical toilet	Pit latrine	Bucket latrine	Not listed elsewhere
Eden District	84.5	6.4	2.0	7.1
Kannaland	73.6	16.1	1.8	8.6

FIGURE 11: ACCESS TO SANITATION - KSEP 2016

Sewerage is predominantly of domestic origin and flows to the works under gravity. The Ladismith waste water works was originally completed and has a nominal capacity of 1.2 MI/d. The works is classified as a Class C Works (Infrastructure Grading).

The existing treatment works is a conventional biological works that comprises of a primary settling tank, biological filter, humus tank, anaerobic digester, sludge drying beds and four maturation ponds. In Ladismith a small part of the town is serviced by a pump station with the rest feeding to the works via gravitation. The municipality has commissioned Aurecon to prepare a report on the upgrading and expansion of the Kannaland Waste Water Treatment Works. A scoping report has been finalised

which will result in a (1) technical feasibility, (2) preliminary design and (3) Implementation Ready Study Report.

A significant portion of the older sections of Calitzdorp is serviced by means of conservancy and septic tanks that are regularly emptied by vacuum tankers. The western side of Calitzdorp has a waterborne wastewater reticulation system, with gravity mains and associated pump stations that deliver the wastewater to the WWTW. The low cost housing in this town is serviced with waterborne sanitation and is pumped to the WWTW. The waste water treatment works is a simple pond system, and has a capacity of 0.32 MI/d. Currently no flow measurement devices are installed at Calitzdorp WWTW and estimates of present and future flow are based on population and water usage estimates.

In Zoar the existing works is a class E facility, which makes use of oxidation ponds. The WWTW has a tank that is used to settle solids in the effluent perform an anaerobic digestion function and act as a balancing tank for peak flows. No chemical disinfection currently takes place. A preliminary estimate of the component capacities and overall capacity of the works has been estimated as 0.25MI/d.

3.3.7.4 Access to electricity

According to the socio economic profile 2016, 89.7 per cent of households in Kannaland had access to electricity for lighting purposes in 2014. This is slightly below the District average of 90.7 per cent during this period.

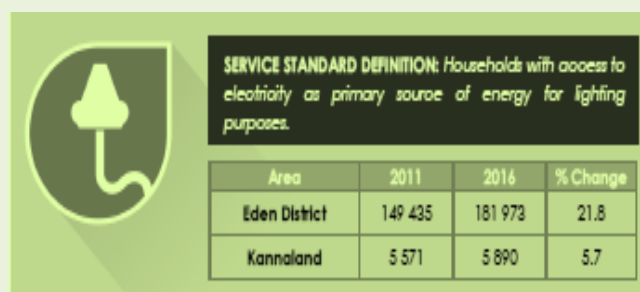


FIGURE 12: ACCESS TO ELECTRICITY - KSEP 2016

3.3.7.5 Access to waste removal

The data indicates that within Kannaland, 66.3 per cent of households have their refuse removed at least once a week. This is the lowest level in the District and it is also lower than both the Province and the District in terms of the levels of access to refuse removal by the local authority at least once a week.

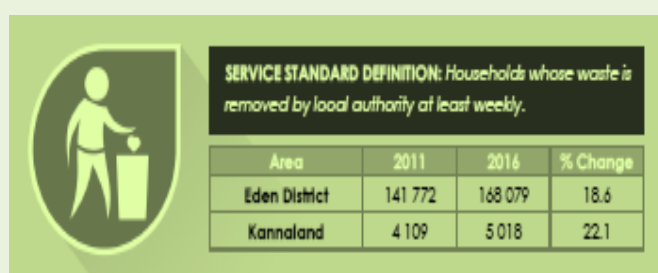


FIGURE 13: ACCESS TO WASTE REMOVAL - KSEP 2016

Challenges in terms of waste management may include limited land availability for waste management facilities. The municipality has identified and prioritised the landfill sites as a priority. It was also identified by the community that waste containers be placed at strategic points to be collected by the municipality.

3.3.7.6 Access to adequate housing

Municipality	House or brick structure on a separate stand or yard	Traditional dwelling	Flat in a block of flats	Town/ cluster/ semi-detached house (simplex, duplex or triplex)	House/ flat/ room in backyard	Informal dwellings back in backyard	Informal dwelling/ shack NOT in backyard, e.g. in an informal squatter settlement	Room/ flatlet not in backyard but on a shared property	Other
Eden District	75.0	0.7	2.3	3.5	1.5	5.9	9.3	0.7	1.2
Kannaland	94.9	0.4	0.6	0.5	0.4	1.1	1.3	0.1	0.7

Decent housing with the relevant basic services is essential for human security, dignity and well-being.

FIGURE 14: QUANTEC RESEARCH 2015

The housing project in Calitzdorp was recently completed as per the phases indicated in the Human Settlement Plan of Kannaland. More detailed information can be obtained in the HSP (attached).

3.3.8 Spatial and Environmental Analysis

This component includes: pollution control; biodiversity and landscape; and coastal protection. Urban expansion and farming in marginal areas to meet the demand of an increasing population, are leading to a loss of land and productivity. Secondary pressures, such as climate change, desertification and alien plant invasion, are further contributing factors.

Humans influence land degradation in three principle ways:

- The use of land resources for productive purposes: for agriculture, the collection of wood for fuel and building materials, as well as water abstraction and mineral extraction.
- The use of land resources for space needs, for example, settlement, infrastructure and recreational purposes.
- A tertiary set of influences comprises the incidental and often remote impacts of economic activity on land resources: for example, pollution of (sub) surface and atmospheric water resources by industry, alien plant invasion and climate change.

Agriculture has transformed much of Kannaland's natural landscape to cultivated lands. The Little Karoo, in general, which is under extensive agriculture, game farming and conservation land uses, falls within the category "Succulent Karoo /Spekboom/ Fynbos".

Land degradation manifests itself in the soil and in the veld. Sheet erosion is the most common form of soil degradation, with some rill and gully erosion in Kannaland. The Combined Land Degradation Index (CDI) indicates that the most degraded areas within Kannaland are situated around Ladismith and Calitzdorp because of overgrazing. The rest of Eden is only lightly affected by soil and veld degradation issues.

To monitor land degradation in Kannaland, the following indicators need to be identified:

- Area of land under formal conservation protection;
- Landscape change;
- Number of agricultural subdivisions; and
- Combined Land Degradation Index.

Six impact groups associated with land degradation drivers in Kannaland are:

- Farming in marginal areas, which leads to loss of ecosystem integrity, loss of natural habitats and which exerts stresses on the natural resource base, for instance on water through irrigation of crops.
- Subdivision of agricultural land into uneconomically viable units and urban sprawl leads to diminishing agricultural returns.
- Urban expansion triggered by population growth and a better standard of living leads to the loss of agriculturally productive land and other land conflicts (e.g. conservation vs. urban development).
- Alien plant invasions cause veld degradation, a reduction on the quality and quantity of water and hence the loss of biodiversity resources.
- Climate change (global warming) brings an increase in the frequency of extreme weather events (droughts/ flooding), change in rainfall patterns and in extreme cases desertification. Loss of biodiversity is strongly associated with these phenomena.

Kannaland falls largely within the Gouritz Water Management Area, a grouping of primary water catchments, which are diverse in nature, evaporation exceeds rainfall in the northern catchments meaning that these are water stressed areas. In contrast, rainfall generally matches evaporation in the southern catchments meaning that these are generally moister environments. In the Gouritz River catchment the development of surface water resources has reached its full potential and all the water is fully utilised.

The inland water resources are under severe pressure through urban population increased. In concert with population growth Kannaland has experienced expansion in the provision of water services. In addition, low cost housing projects emerging from the National Reconstruction and Development Programme (RDP), together with the National Water and Sanitation Programme which has contributed to water demand. A further pressure on the water resource is the influx of tourism over the holiday season, introducing a spike in water demand. Economic growth and consumer and export demand has led to an increase in agricultural production, which in turn has placed greater pressure on water resources through greatest abstraction for irrigation.

Alien invasive plant and animal species, introduced by human actions either accidentally or for commercial purposes, are proving a major threat to the quality and quantity water, as well as to the biodiversity of freshwater systems. Climate change is expected to lead to slightly reduced rainfall over the Kannaland region, increased variability of rainfall, fewer but heavier precipitation events and increased temperatures and evaporation. These effects could work together to increase flooding, but could also reduce base-flow (long term low flow).

3.3.9 Biodiversity

Owing to its broad range of climatic conditions, geology, soils and landscapes, Kannaland has a very substantial share of global biodiversity within its borders. Kannaland's biological heritage is important in many ways – providing ecosystem services like clean water, contributing directly to the economy through industries like fishing and tourism, supporting livelihoods by providing food, medicines and building materials and generally improving health and well-being. Through habitat destruction and ill-conceived developments biodiversity is under threat world-wide. To counteract this threat Kannaland should protect representatives of as many types of community and ecosystem as possible. By conserving suitable habitat, we are also improving the survival chances of the species and populations contained therein. Living landscapes preserve the option value of biodiversity – the potential to provide benefits in the future.

Important driving forces putting pressure on the biodiversity resources of Kannaland are:

- Population growth;
- The demand for economic growth to provide wealth and job creation;
- Demand for housing and associated services for historically disadvantaged people;
- Unsustainable extraction of natural resources as a result of poverty or greed;

- Poor land use practices promoting soil erosion and infestation by invasive alien plants;
- Poor waste and pollution management;
- Climate change; and
- Lack of understanding

In terms of appropriate responses, the mainstreaming biodiversity consideration into socio-economic agendas holds most promise to turn the situation around. It is necessary to:

- Integrate the protection and management of biodiversity resources with all human development by means of regional and national conservation initiatives;
- Build capacity in the areas of conservation assessment, taxonomy, green technology and knowledge transfer;
- Increase capacity in environmental law enforcement, management and education;
- Strengthen existing biodiversity conservation programmes to identify ecosystems, species and genetic resources that are at imminent risk of extinction;
- Implement strong counter measures to slow down the speed with which the loss of biodiversity occurs; and
- Link biodiversity protection and economic stimulation, as biodiversity protection provides an opportunity for less formal, nature-based community initiatives to act as economic engines and job creators.

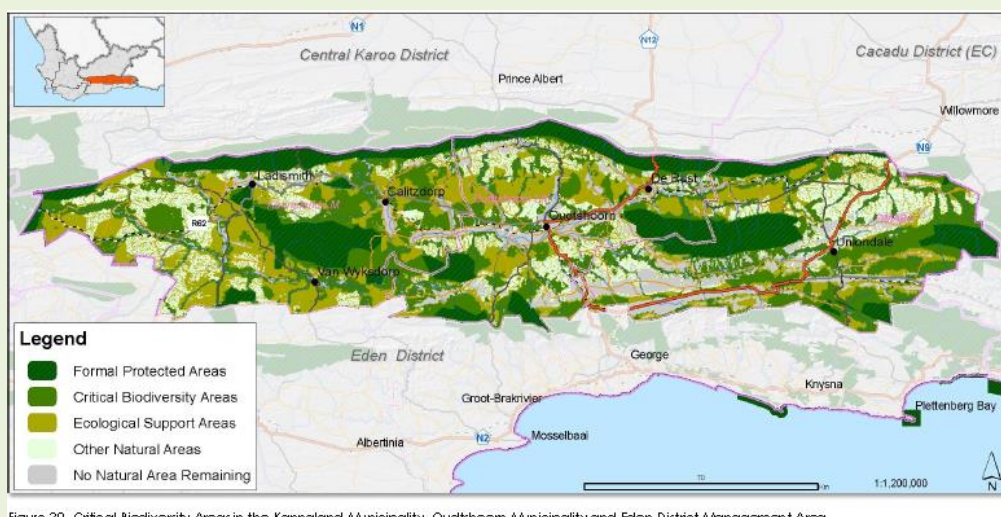


Figure 20. Critical Biodiversity Areas in the Kannaland Municipality, Oudtshoorn Municipality and Eden District Management Area.

FIGURE 15: CRITICAL BIODIVERSITY AREAS -

3.3.10 Climate

There is general scientific agreement that the world is now warmer than at any time in the last 1000 years, and that the cause for this warming is due to human activities. Kannaland is at risk from projected changes in rainfall pattern and warming induced by changes in the global energy balance and atmospheric water balance.

Trends in climate over a five-year period can easily be meaningless or insignificant in a statistical sense. However, the average for the five-year reporting period may be useful for simple comparative purposes against the long term average. Once a continuous ambient air quality sampling programme is in place, quarterly air quality reports which will provide useful state of environment data.

Increased drying and changes to the seasonal nature of precipitation will bring an increase in irrigation requirements which are likely to desiccate wetlands and threaten seasonal ecosystem interactions within the wetland. Such impacts are likely to further threaten the biodiversity of freshwater resources, which in turn will impair the environmental services they provide. The impact caused by climate change in terrestrial ecosystems include the detrimental effects associated with wildfires due to increased berg-wind conditions, and the possibility of changes in the distribution of alien invasive species, apart from changes in indigenous species distribution and interactions.

Numerous economic sectors could be affected by changes in temperature and precipitation patterns. The impact is likely to be felt in agriculture, fisheries, forestry, the manufacturing industry, tourism, finance and investment, transport, communication and trade, and construction. Climate change is likely to impact water services in terms of diminishing reserves on the one hand, and damage to infrastructure due to heavier precipitation events on the other.

The climate in Kannaland is known for its hot and dry summer days. The average annual rainfall is about 270 mm, with rainfall occurring throughout the year. The average midday temperatures range from 16.6°C in July to 29.6°C in January and the mercury does drop to 3.2°C during winter nights. The municipal area is very popular amongst domestic and foreign tourists for its rural rustic Karoo scenery. Our unique offerings in the heart of the Klein Karoo, the local top class brandy and top class cheese industries, is an attractive tourist destination for local and foreign tourist who will and can enjoy trying new delicacies.

An important role and function of the municipality is to balance the need for development with the need to reserve the fauna and flora which are an important leverage within the agriculture and tourism industry. The area is very popular amongst artists, cyclists and off-road enthusiasts who come here for untouched natural beauty. The municipality has a difficult task to balance the interest in the natural environment with the need to promote development which will address the socio under development, infrastructural backlogs and the need to promote investment inflows to the area. The Spatial Development Framework (which is reflected in the IDP) will be one of the key strategic tools with which the municipality will balance these competing interests.

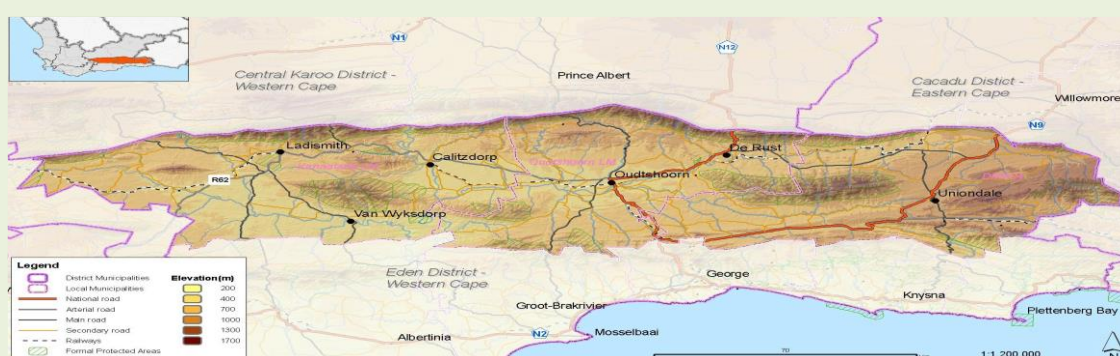


FIGURE 16: PROTECTED LAND AREAS: EDEN DISTRICT

3.3.11 Kannaland Flora

The Cape Floral Kingdom is characterized by its exceptional richness in plant species. More than 8 700 species are known to exist, with more than 68% of these being endemic. The Cape Floral Kingdom, thus, compares with some of the richest floras worldwide. It is the smallest of the Floral Kingdoms and covers a mere 0.06% of the earth's surface, and is the only Floral Kingdom contained in its entirety within a single country.

Kannaland is a region of extensive plains, arid foothills and rugged rocky ridges and includes a wide range of microhabitats with extreme seasonal and diurnal temperature fluctuations. There are 1325 plant species in this area, including 182 Succulent Karoo endemics and 92 Red List species (www.skep.org.za). While unique and rare species are found throughout the landscape, many of the endemics are concentrated along veins of weathered quartz, where patches of white pebbles provide camouflage and moderate the temperature for “stone plants”

3.3.12 Disaster Management

The purpose of Contingency Plans is to forecast, prepare for incidents and to identify roles and responsibilities of the departments within the municipality. It enhances the municipality's capabilities to effectively and efficiently manage and mitigate any situation that could pose a threat to life, property and the environment.

The limitations in capacity is of a high nature and roles with specific primary and secondary roles/functions is set out to guide the sections within the municipality to work collectively for all to participate and plan for before / during and after disasters within the area. As defined in the prescriptions of the Act, the Municipal Manager is the Head of Disaster Management with the delegation of assistance through to the Director of Corporate Services.

A review and update of the disaster risk assessment of the Eden District Municipality (EDM) was completed by Disaster Risk Management (Pty) Ltd (DMS). The next review will take place during the 2016/17 financial year.

This risk assessment, a scientific tool, indicates the total risk for the Eden District. The table below lists the priority hazards identified during the 2005 DRA and new hazards identified during the 2013 DRA.

2013 Risk Assessment	
Priority Hazards Identified	New Hazards Identified
Drought	Seismic hazards
HZMAT: Road, Rail	Petro-Chemical Fire Hazards
Fire	Alien Plant Invasion
Floods	Predator Animals
Slope Failures	Structural Integrity Old Gouritz Bridge
Road Accidents	Storm Surges
Animal diseases	Coastal Erosion (Sea Level Rise)
Dam Shedding	Service Disruptions
Human diseases	Social Disruptions

The municipality has a Disaster Management Plan and the establishment of a Disaster Management Centre has also been identified in terms of the municipality's Disaster Management planning however the municipality does not have a functional disaster management ICT, GIS and early warning system. The municipality is currently making use of the Disaster Management DS Tool of the Western Cape Disaster Management Centre to assist the municipality in making informed decisions relating to Disaster Management.

Currently the entire municipal area face the nightmare of drought as per experienced in 2015 due to low rainfall. As throughout this IDP is identified that water storage capacity is the main problem and has therefor prioritized the water and sanitation needs as a high and urgent matter to be attend to.

During the fire season in Ladismith, fifty four veld fires occurred and twenty houses were damaged due to fires. The fire occurring at the Ladismith Cheese Factory in 2015 resulted in a Joint Operational Centre that was activated. During this fire additional Kannaland municipality received additional firefighting support from Oudtshoorn Municipality and the Eden District Municipality. Eden Disaster Management together with Kannaland Disaster Management will continue to engage on measures to reduce residual risk.

The procedures in general for disasters or major incidents are to activate a Joint Operation Centre, which is currently run from the municipal offices.

3.3.12.1 Hazards / Vulnerabilities Assessments

The Eden District Municipality completed a risk and vulnerability assessment during 2006 and the following were identified:

Assessment	Description
Biological: Human Epidemics	HIV/AIDS and TB is expected to be high among farm workers in Kannaland Municipality. However, there is, as is the case in most of the EDM, insufficient data available to confirm this.
Biological: Agricultural Epidemics	Agricultural epidemics is a major concern on chicken and ostrich farms where avian flu may once again break out and where major losses have already occurred due to the disease.
Human: Events and Civil unrest	The risk of event-related disasters and civil unrest is very low, due to the rural nature and general low population density, of the communities in the Kannaland.
Environmental: Degradation	Environmental land and water pollution related to hazardous substance spillages pose a risk along the major transport routes in the Kannaland. Environmental degradation may occur as a result of the over-use of fertilisers, as is the case in much of the EDM. Underground water abstraction also poses unknown risks with regards to its effect on the water table and the associated vegetative cover. Drought conditions pose a risk and this degrades the natural environment and its ability to sustain farming practices. It also increases the possibility of a loss of biodiversity.
Environmental: Fires	Plantation fires are a concern in this Kannaland, especially since the ability of the municipality to deal with large-scale disasters of this nature is perceived to be inadequate.
Geological:	There does not seem to be notable threats Kannaland in this regard.

Assessment	Description
Earthquakes and landslides/rock falls	
Hydro-meteorological: Floods	There does not seem to be notable threats Kannaland in this regard.
Technological: Transport	As mentioned regarding environmental degradation, transport-related disasters could cause damage to the environment.
Technological: Major disruption of key services	The impact of a major disruption in key services in Kannaland is relatively low, due to the predominantly rural nature of the municipality residences, where many of the settlements already have access to alternative services or they can operate on limited service provision without too much difficulty. Water supply may, however, be problematic should long-term drought conditions prevail.
Technological: Industrial, explosions and fires	Filling station fires/explosions, LPG gas supply establishment fires/explosions, fires in high-rise buildings, and large structure fires all pose risks in this area. The possible impacts are exacerbated by the perceived lack of capacity in the Kannaland to manage and respond to such events.

TABLE 7: HAZARDS / VULNERABILITY ASSESSMENTS

The impact prioritization for the most important risks (in order of priority) is as follows:

- Drought
- Floods
- Plantation and vegetation fires
- Agricultural epidemics
- Hazardous materials transport

3.3.12.2 Risk Reduction Measures

3.3.12.2.1 Risk Preparedness

Risk Management (to sec 62 of the Municipal Finance Management Act (MFMA)) is a systematic process to identify, evaluate and address risks on a continuous basis in order to introduce preventative measures. Risk management is integrated with the IDP and linked to the strategic outcomes.

The Disaster Risk Plan of the Municipality contains preventative as well as prepared responses towards the risks that have been identified.

Hazard, risk and vulnerability assessments (HRAVA)

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.

3.3.12.2.2 Risk Prioritisation

The impact prioritisation for the most important risks (in order of priority) is as follows:

- Drought
- Floods
- Plantation and vegetation fires
- Agricultural epidemics
- Hazardous materials transport
- Social Cohesion Risks

3.3.12.2.3 Risk Reduction Measures

No other risk reduction measures are in place other than proactive measures during early warnings and forecasts or progression of incidents. Preventive measure are relocating or evacuating members of communities and providing support at a local level or as assisted through the District. The municipality does not have a functional disaster management ICT, GIS and early warning system.

- Disaster Management Advisory Forum has been established.
- Meetings/ forums / workshops (newly established Disaster Management Forum).
- Service Level Agreement/ Memorandum of Understanding with Eden District municipality.
- Facility for Fire Services in process.

3.3.12.2.4 Response and Recovery Measures

Kannaland's Disaster Management function is supported by the Eden District Municipality and the Provincial Disaster Management Centre. The main Risks which may have a potential disaster-risk impact:-

- Natural Risks
- Drought;
- Extreme Weather (heat wave / cold snap);

- Floods
- Snowfalls
- Windstorms
- Earthquake
- Desertification / Soil erosion / Loss of biodiversity
- Thunderstorms and lighting
- Predators
- Service Risks
- Disruption of Electricity Supply / Power Failure (sustained);
- Disruption of Telecommunications & IT Services or Public Address;
- Solid and sewerage waste disposal management
- Disruption of Water Supply
- Disruption of Sanitation & Storm water Systems
- Disruption of Solid Waste Removal Services
- Civil Unrest
- Bomb Threat / Hostage-taking/ Bomb explosion
- Hooliganism / Civil Unrest / Rioting / Public Disorder
- Disruption of Commercial or Governmental Activities, incl. Strike action by personnel
- Accidents
- Road Traffic Incidents, including Road Transportation Disruption/Blockades/Traffic Congestion;
- Structural Collapse;
- Hazmat Incident or Chemical or Biological Agents' or Radio-active Materials' (CBR) Release
- Fire – Veld / Structural / Effects of Pyrotechnics
- Rail Incident
- Aircraft Incidents
- Health Risks
- Epidemic / Major Infectious Disease Outbreak, incl. Food Safety issues
- Human Disease
- Animal Disease
- Environmental Pollution – Ground / Air / Water
- Shale gas drilling and Uranium mining and extraction
- Ground water pollution

No other risk reduction measures are in place other than proactive measures during early warnings and forecasts or progression of incidents. Preventive measures are relocating or evacuating members of communities and providing support at a local level or as assisted through the District.

3.3.12.2.5 Mitigation measures

- Water restrictions in place – notify the public through strict water restriction notices
- Drilling of boreholes
- Cleansing of storm water drainage systems
- Disaster Management Advisory Forum has been established.
- Meetings/ forums / workshops (newly established Disaster Management Forum)
- SLA/MOU with Eden District municipality

3.3.13 Tourism

This modest allocation by the municipality for tourism should be seen against the context of the broader package of municipal programs (e.g. keeping local towns clean, enhancing the aesthetic appeal of the built and natural environment and its planning framework).

Kannaland LM is in dire need of a Tourism Masterplan that could amongst others unlock local economic opportunities through:

- Proper Spatial Planning – e.g. promoting economic growth along the R62, agri-tourism, adventure tourism, etc;
- Development of an Art, Culture and Heritage Plan; which will identify sites of architectural, heritage significant areas and resources which will be able to contribute to the unique selling proposition of the area and attract people to the Kannaland region through cultural tourism;
- Leveraging assets such as the caravan park, through either alienation or public private partnership which could stimulate economic activity.

Kannaland's local economy is built on the opportunities created by tourists visiting the area. It is essential that the tourism industry be further developed and investment into this industry be promoted to ensure continuous growth. The aim is that each town to have a tourism satellite office which will reside under the Kannaland Tourism umbrella. Each town has its unique economical setup and programs.

The 2 local tourism bureau offices currently maintain and operate two websites:

- Ladismith: <http://www.ladismith.org.za>
- Calitzdorp: <http://www.calitzdorp.org.za>

The figure below (SDF - Figure 3.4.13.1) illustrates the main tourism and cultural attractions in the municipality (ENPAT, 2003). These are made up of various cultural tourism sites (grave/burial sites, monuments, etc) and 2 local hiking trails:

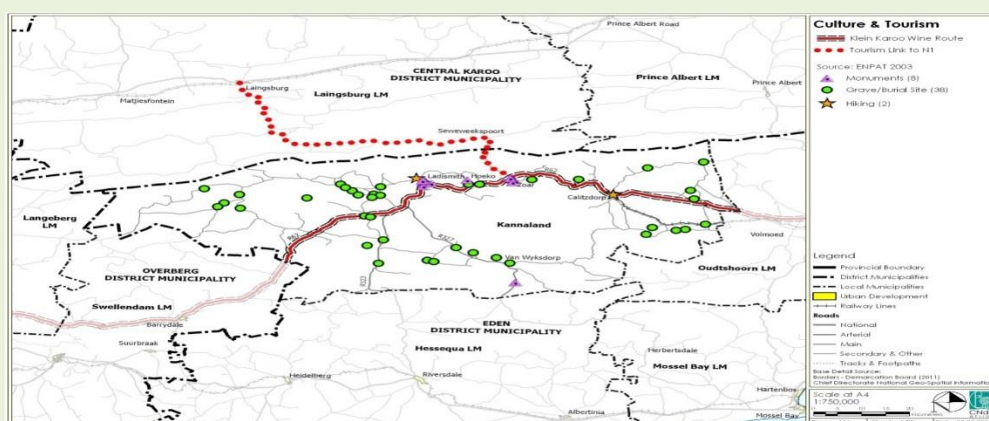


FIGURE 17: TOURISM AND CULTURE ATTRACTION – REFER TO FIGURE 3.4.13.1 IN SDF TOURISM AND CULTURE ATTRACTION

Tourism is one of the key economic sectors in the municipality, calling for the development of a tourism master plan or a municipal wide tourism strategy. The local tourism offices needs urgent support from the government department to assist in either funding of programs or the development of each town – as mentioned a masterplan is needed. The tourism sector can contribute significantly to the reduction of unemployment. The urban areas along the R62 tourism route should maximize their exposure on this route as a means of enhancing economic growth

The Calitzdorp tourism office successfully held the port (wine) and winter festival which bring out the culture of the town to the tourist as well neighboring municipal places.

3.3.14 Agriculture

The Kannaland Municipal area is dependent on the agriculture sector. Economic pressures in the agricultural sector over the past few years forced farm workers to migrate to towns where, in most cases, these families became indigents who must be given free basic services, placing huge financial strain on the resources of Kannaland.

South African agriculture has performed well over the past decade; despite some volatility owing to its dependence on global markets and on an inclement climate, gross value added by the sector expanded by more than 15% in real terms since 2005. Overall growth was influenced by a combination of global and macro-economic forces as well as the climate. Following the recession, growth in the sector recovered and peaked in 2014 at more than 30% before the drought started having an impact from 2015 onwards.

However, this expansion peaked at over 30% in 2014, before declining rapidly in the past two seasons as a result of extreme drought in the summer rainfall regions. The severity of the current drought has reemphasized the importance of a vibrant and sustainable agricultural sector. 2016 in particular will be remembered as a challenging year, the sector's resilience and ability to recover from a shock such as the current drought is underpinned by a combination of key underlying fundamentals linked to the long-term competitiveness of the industry.

Globally, agricultural commodity prices have fallen well below the peaks of 2013, as generally high production levels have replenished stocks. Furthermore, the two demand drivers of the past decade, namely biofuel production and rapid growth of the Chinese economy, are expected to slow significantly over the next ten years.

Crop prices are expected to remain under pressure in the short term, before starting a gradual recovery towards 2020. In South Africa, much of the decline in world prices has been negated by the sharp depreciation in the value of the Rand, which by May 2016 had declined by almost 48% over the preceding 24 month period. South Africa is projected to return to a net exporting position from 2017 onwards, though the projected surplus is unlikely to be sufficient to maintain prices at export parity levels throughout a normal year.

Barley has been competitive in the Southern Cape in the recent past and in light of a favorable yield growth outlook arising from the introduction of new varieties, gross margins are expected to support expansion of barley area at the expense of wheat over the coming decade, provided that the current pricing structure that links barley prices to wheat prices is maintained.

Having expanded rapidly over the past decade, consumption growth of meat and dairy products is projected to slow over the next ten years. This is particularly of significance in the Kannaland due to its prominent dairy industry.

3.3.15.1 Regional Agri-parks project

The Agri-Parks project started in July 2013 as a response to a formal request from the Minister to identify areas in South Africa where crop production can be enabled. As a network it will enable a market-driven combination and integration of various agricultural activities and rural transformation services. The Agri-park will comprise of three basic units:

- The Farmer Production Support Unit (FPSU). 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 mechanization.
- Agri-Hub Unit (AH). The AH is a production, equipment hire, processing, packaging, logistics and training (demonstration) unit.
- The Rural Urban Market Centre Unit (RUMC). The RUMC has three main purposes;

Linking and contracting rural, urban and international 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 latest information and communication technologies.

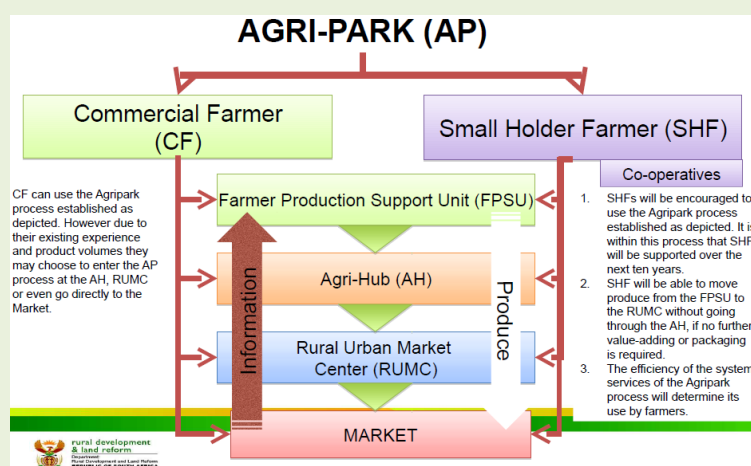


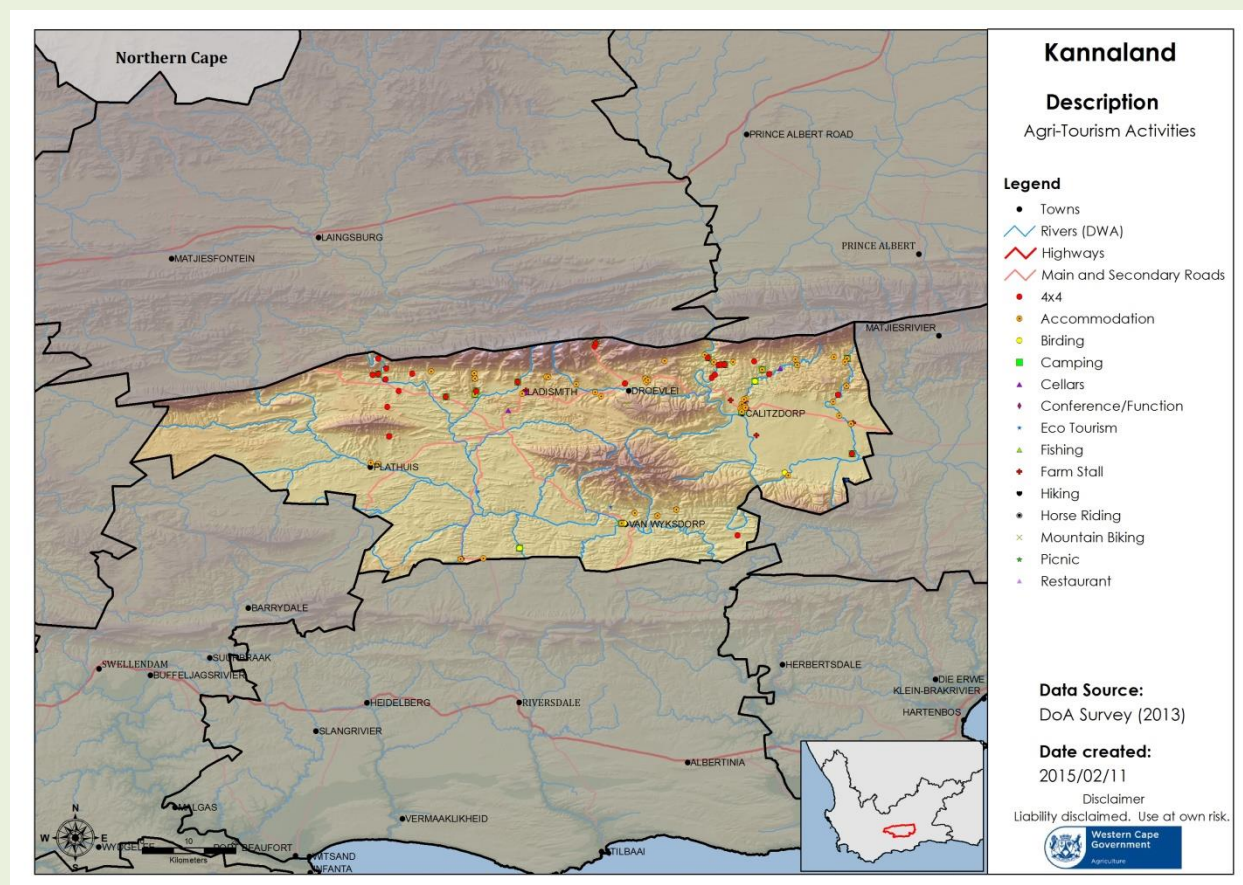
FIGURE 18: AGRI-PARK FRAMEWORK

Agri-parks will be farmer controlled and is aimed to be the catalyst around which rural industrialization will take place. It will be supported by government (10 years) to ensure economic sustainability. The idea is to 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. The establishment of the Agri-park will create job opportunities for the local residents and will add to the economic growth of the district.

3.3.15.2 Agritourism

Type	Count	% of WC
4x4	26	10.8
Accommodation	62	3.2
Birding	16	7.2
Camping	15	6.3
Cellars	14	1.6
Conference/Function Venue	6	0.7
Ecotourism	14	4.8
Fishing	7	3.3
Farm Market	0	0.0
Farm Stall	7	3.3
Hiking	31	7.6
Horse Riding	5	3.1
Mountain Biking	23	7.6
Ostrich	4	28.6
Picnic	4	3.6
Quad Biking	2	4.9
Restaurant	18	2.3



3.3.15.3 Economic value of main commodities

Rank	Area (Ha)	Crop	% of WC
1	7142.7	Lucerne	1.8
2	970.3	Wine Grapes	0.9
3	753.3	Fallow	0.8
4	674.4	Planted Pastures Perennial	0.3
5	643.9	Apricots	20.3
6	556.0	Natural grazing	0.5
7	350.5	Onions	7.4
8	300.8	Small Grain Grazing	0.2
9	296.5	Plums	5.1
10	291.3	Peaches	3.7
	1024.6	Balance	

TABLE 8: ECONOMIC VALUE OF COMMODITIES

3.3.15.4 Livestock

Type	Count	% of WC
Cattle	7008	1.8
Goats	9635	6.3
Horses	219	1.7
Ostriches	25308	12.0
Pigs	838	1.0
Sheep	14001	0.9

TABLE 9: LIVESTOCK

3.3.15.5 Targeted Commodities

Proposed Agri-park commodities have been identified with inputs from the District and Local Municipalities and DAMC using the following criteria:

The presence of an existing sustainable production advantage (both currently and into the future); and 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.

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.

3.3.15.6 Land Classes

Table 2: The area covered by level one and level 2 land classes in the Kannaland and Oudtshoorn Local Municipalities, and Eden District Management Area.

Landcover (Hectares)		Kannaland	Oudtshoorn	DMA04	Total Municipal PD
Level 1	Level 2				
Natural		380,884	251,232	320,205	952,320
Natural	Natural	118,886	133,629	217,416	469,931
Natural	Near Natural - AIP	18,199	17,882	11,028	47,108
Natural	Near Natural - Mod Degr	243,798	99,721	91,761	435,280
Natural	Unknown	-	-	0	0
No Natural		21,795	41,092	57,925	120,812
No Natural	No Natural Agric	17,279	34,962	53,584	105,826
No Natural	No Natural Dam	775	1,261	934	2,970
No Natural	No Natural Urban	668	2,010	368	3,045
No Natural	No Natural - Other	3,074	2,859	3,039	8,972
Degraded		72,770	61,033	38,499	172,302
Grand Total		475,449	353,357	416,629	1,245,435

Table 4. Summary table of number of vegetation types found in each Ecosystem Status Class

Municipality	Kannaland	Gudtsboorn	DMA04	Total Municipal PD
Ecosystem status (# Vegetation units)				
Critically Endangered	8	6	4	12
Endangered	10	6	2	13
Vulnerable	11	9	6	19
Least Threatened	125	62	51	191
Total Number	154	83	63	235

FIGURE 19:
VEGETATION TYPES**Agricultural Infrastructure**

Type	Count	% of WC
Abattoir - red meat	1	1.8
Abattoir - white meat	0	0.0
Agro processing plant	4	1.5
Airfield	3	1.8
Chicken batteries	0	0.0
Chicken batteries - broilers	0	0.0
Chicken batteries - layers	0	0.0
Chicken hatchery	0	0.0
Cool chain facilities	0	0.0
Crush pen	91	3.0
Crush pen and dip tank	6	1.9
Dairy	17	2.2
Dam	672	2.1
Feedlot - beef	0	0.0
Feedlot - pigs	0	0.0
Feedlot - sheep	0	0.0
Fruit cool chain facilities	0	0.0
Fruit packers	0	0.0
Grain dam - Commercial	0	0.0
Homestead	431	7.7
Homestead - labour	84	0.6
Nursery	0	0.0
Other	0	0.0
Packhouse	13	2.1
Piggery	0	0.0

Shade netting	0	0.0
Silo bags - Commercial	6	27.3
Silo bags - Non Commercial	0	0.0
Silos - Commercial	0	0.0
Silos - Non Commercial	0	0.0
Tunnels	5	0.6

TABLE 10: AGRICULTURE INFRASTRUCTURE

3.3.16 Integrated Rural Development

The Kannaland Municipality has motivated that the municipality must be declared a Comprehensive Rural Development (CRDP) node by the Department of Rural Development. Approval is still awaited. The Council approved Spatial Development Framework provides the municipality with a credible roadmap to develop rural nodes within the municipality.

According to the Integrated Rural Development Strategy of National Government, rural areas throughout the world tend to have similar characteristics. The Kannaland Municipality is no different and is also characterised by the following:-

- i. Populations which are spatially dispersed.
- ii. Agriculture which is the dominant, and sometimes the exclusive economic sector,
- iii. Opportunities for resource mobilisation which are limited.
- iv. Infrastructure backlogs.
- v. These characteristics mean that people living in rural areas face a set of factors that pose major challenges to development.
- vi. The spatial dispersion of rural populations often increases the cost and difficulty of providing rural goods and services effectively.
- vii. The specific economic conditions in rural areas result in fewer opportunities than in non-rural locations.
- viii. Consequently, the tax base is limited, so rural areas are rarely able to mobilise sufficient resources to finance their own development programmes, leaving them dependent on transfers from the centre.
- ix. Factor markets in rural areas often operate imperfectly, rendering the search for efficient outcomes an extremely challenging one.

- x. Furthermore, rural areas are often politically marginalised, leaving little opportunity for the rural poor to influence government policies.
- xi. Policies have also consistently discriminated against agriculture through high levels of taxation and other macro-economic policies that have adversely affected agricultural performance and the rural tax base.

In defining itself as a rural municipality, the Kannaland Municipality seeks to understanding the multitude, complexities and challenges that rural communities face. In doing so the municipality is able to partner with developmental agencies around access to developmental programs that are aimed at improving the quality of life of rural households. This will also identify the economic potential of each area. The rationale of declaring Kannaland Municipal area a rural development node, is to access resources to:

- i. Promote the implementation of land reform policies of national government through its Spatial Development Framework, Integrated Development Plan and leverage existing council resources such as property and operational budget to promote investment and co-funding.
- ii. Promote the stimulation of agricultural production with a view to contributing to food security through its LED strategy.
- iii. Promote the enhancement of rural livelihoods and rural food security through the LED Strategy;
- iv. Improve service delivery to ensure quality of life – increased investment in the delivery of services to rural areas, including housing, water, sanitation and energy – using, where appropriate, alternative technologies to overcome physical and other impediments by working with provincial and national government through the Housing and Infrastructure program and policies;
- v. Implement a development program for rural transport – the formulation of a Rural Transport Program that will aim at promoting rural transport infrastructure and services through coordinated rural nodes and linkages by working with provincial and national government through its Rural Transport Strategy.
- vi. Partnering with the provincial and national government to promote skills development and accessing financial resources elsewhere.
- vii. Revitalization of rural towns by accessing spatially targeted grants for the revitalization and development of rural towns to serve as service centres for rural economies. This will involve the development of hard and soft infrastructure, including institutional networks for marketing, storage, advisory services, finance and improved agro-logistics;

- viii. Through the Kannaland Local Economic Development Strategy explore and support non-farming economic activities through initiatives which need to be devised to support other forms of rural potential, including tourism, light manufacturing and cultural work;
- ix. Through the IDP, create a platform through which agencies, working towards better focus of energies, integration of efforts, optimal utilisation of resources and initiatives to promote rural development.

3.3.16.1 Ecosystem Status

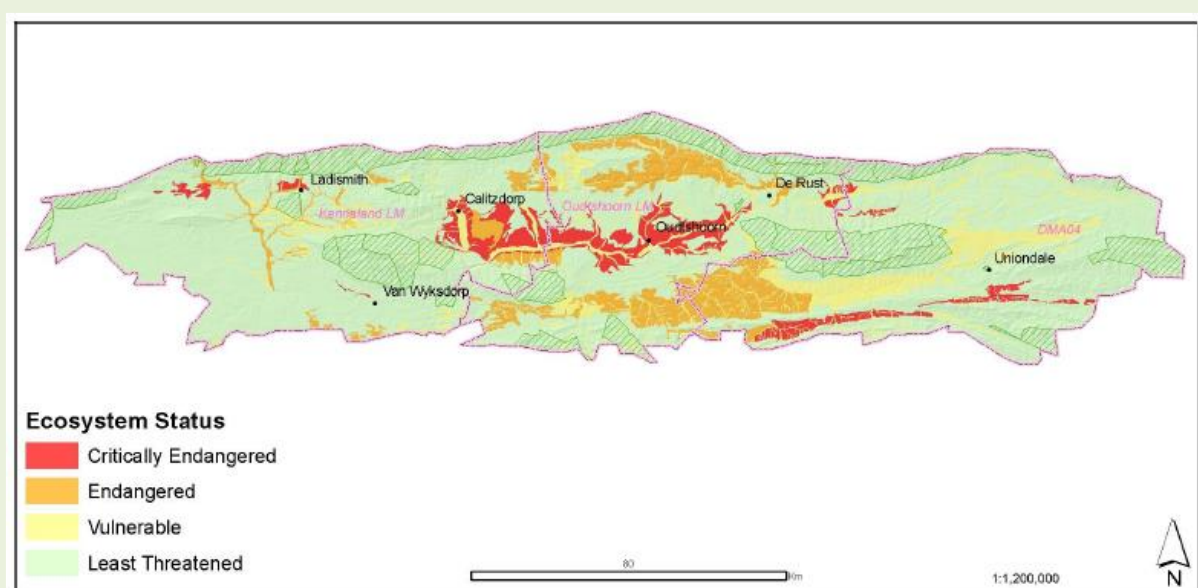


Figure 12: Terrestrial ecosystem status (transformation and degradation combined). Due to the high levels of transformation and degradation 12 habitat types are Critically Endangered, 13 are Endangered and 19 are Vulnerable. A total of 235 habitat types are described in the planning area by Vlok et al. 2005.

FIGURE 20: ECOSYSTEM STATUS

A small portion of one national park (Garden Route National Park), ten Western Cape Provincial Reserves, one Eastern Cape Provincial Reserve, four Mountain Catchment Areas, seven Cape Nature biodiversity stewardship sites and numerous private conservation areas are represented in the planning domain (provincial reserves, national parks, mountain catchment areas and contracted biodiversity stewardship sites were considered Formal PAs in protection status calculations, private reserves are classed as informal CAs).

Protected Areas cover 30.4% of the planning domain with 229,4961ha (18.4%) being formal protected areas and 149,103ha (12%) comprising conservation areas.

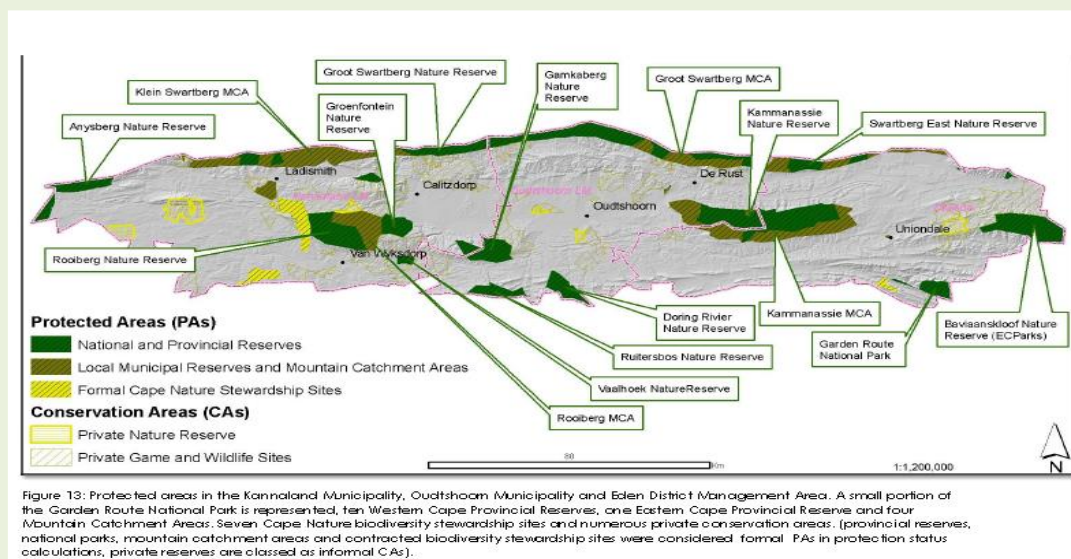


FIGURE 21: PROTECTED AREAS

3.3.16.2 General Priority issues/challenges

3.3.16.2.1 Focus on water

In the current environment of large scale and rapid urbanisation and the pressure to create employment opportunities that result in sustainable and dignified livelihoods, agricultural water use has had a rather low priority. However, the severe impact of the recent drought has again brought the importance of irrigation to the forefront as the country would have been dumped into a much worse position had irrigation not supplemented dryland production, not only to boost food production but also to provide vital support with respect to employment in the industry. In its initial research for the planning commission, BFAP showed that the actual water required to expand the total area under irrigation by 142 000 ha in order to contribute to a million job opportunities by 2030 was manageable, despite the major challenges the country faces with respect to water resources.

3.3.16.2.2 Cash-flow

One of the greatest challenges for drought affected farmers is the ability to restore a farm's cash flow position to ensure a positive cash balance at the end of a year. Climatic challenges remained a factor as the drought conditions and extremely high temperatures in December 2015 and January 2016 altered and provoked irrigation management strategies and innovations.

3.3.16.2.3 Ease of Doing Business

Beyond regional commitments, there is evidence of improvements in domestic marketing policies and regulatory environments. The distance to frontier score benchmarks countries' economies with respect to regulatory best practices. It shows how the regulatory environment for local entrepreneurs has changed over time in an economy.

3.3.16.2.4 Enabling the Business of Agriculture

In the Agricultural sector, we observe improved policies aimed at supporting inclusive participation in agricultural value-chains and fostering an environment conducive to local and regional private sector investment.

3.3.16.2.5 Rise of medium-scale farmer and large-scale land acquisitions

The demand for agricultural land in Africa has risen dramatically since the surge in global food prices starting in 2007. This demand has been accelerated by agricultural subsidies and land policies in many countries. Recent studies have found relatively wealthy Africans (both rural and urban) are investing in land at an unprecedented rate leading to the rapid rise of medium-scale farmers in Africa.

3.3.16.2.6 Megatrends

Strong economic growth linkages between agriculture and other segments of the economy mean that expanding the productive capacity and economic returns of agriculture could promote an inclusive pattern of economic growth with stronger multiplier effects on employment creation and poverty reduction. Many expect urbanization, income growth and an expanding population to result in a migration of labour from farming to nonfarm sectors as well as the downstream stages of food systems.

3.3.16.2.7 Climate Change

Given the vast variation in climatic zones on the continent, the impacts of climate change on country-specific farming systems will vary and is difficult to predict. However, there is consensus on two general predictions of climate change; these include greater variability in agricultural production and a decline in crop productivity. The alternative, ecological intensification of agriculture would require minimizing the constraints to appropriate technology adoption; focusing on sustainable water use through irrigation; and implementing best farming practices. Given the rising competition for water (to

date, 70% of available water is used by irrigation farming) it will be imperative that agriculture focus on developing irrigation technology that improves water use efficiency and enhances our ability to adapt to climate change

3.3.16.2.8 Fruit sector

Strong growth in fruit exports in recent years has allowed the sector to make a positive contribution to economic growth and job creation. Aggregating total exports of apples, pears, peaches, plums and apricots from South Africa into the global arena.

3.3.16.2.9 Commercial deciduous fruit farming in SA

The outlook for market prices, both locally and internationally, remains positive reflecting a marginal increase even in real terms. This suggests some relief for producers in combating the proverbial price-cost squeeze. Investments tend to follow product prices as proxies for willingness to undertake risk and hence to establish and replace orchards.

Apple and pear producers operate in a particularly uncertain decision making environment, facing continuous change such as dynamic technological innovations, exposure to international markets as well as changing national and international legislation and regulations. The sustainability of pome farming systems will therefore be influenced by economically rational decision-making and the ability to adapt to a changing decision making environment. Not only technical efficiency (like irrigation scheduling, orchard practices, etc.), but also strategic planning and innovative management are important to accommodate trends and drivers of change such as:

- Irrigation dependence - in future the total share of available water to agriculture will probably decline. Furthermore, climate change will have an effect on rainfall and temperatures. Thus the need for optimal irrigation efficiency cannot be overstated. Furthermore, choice of pome cultivars when replacing orchards and even choice of enterprises will become more important as rainfall patterns and intensity change and minimum and maximum temperatures in crucial periods of the production year change.
- The ratio between the cost of labour and capital (like mechanical equipment) will influence employment patterns. The use of specific capital equipment, like mechanical platforms can increase labour efficiency and productivity.
- The share of exports in production implies that the exchange rate is an important driver of the profitability of these crops.

- Fruit production systems have to adhere to specific national and international food safety and environmental legislation and regulations, as well as to standards set by various local and international retailers (e.g. GLOBAL G.A.P.).
- Education and training of farm workers is important, contributing to, amongst others, higher productivity, better communication and job satisfaction. Investment in quality training facilities and schools (on national and provincial level) will improve the quality of human capital.
- Plant density, tree shape, canopy management and orchard design can contribute to higher production and better quality fruit. The efficiency of activities like thinning, pruning and harvesting will also be influenced by these considerations.
- Netting for shade and / or hail protection could be considered in specific producing areas.
- How the National Development Plan will unfold and materialise, and specifically the effect of the land reform policy and programmes, small farmer development and Agricultural Broad Based Black Economic Empowerment (AgriBEE) will influence the structure, stability and prosperity of the commercial deciduous fruit farmers. .
- Lack of clarity and various versions of possible land reform increase uncertainty and can amongst others affect the replacement strategies of orchards, employment patterns, food security and export potential of the country.

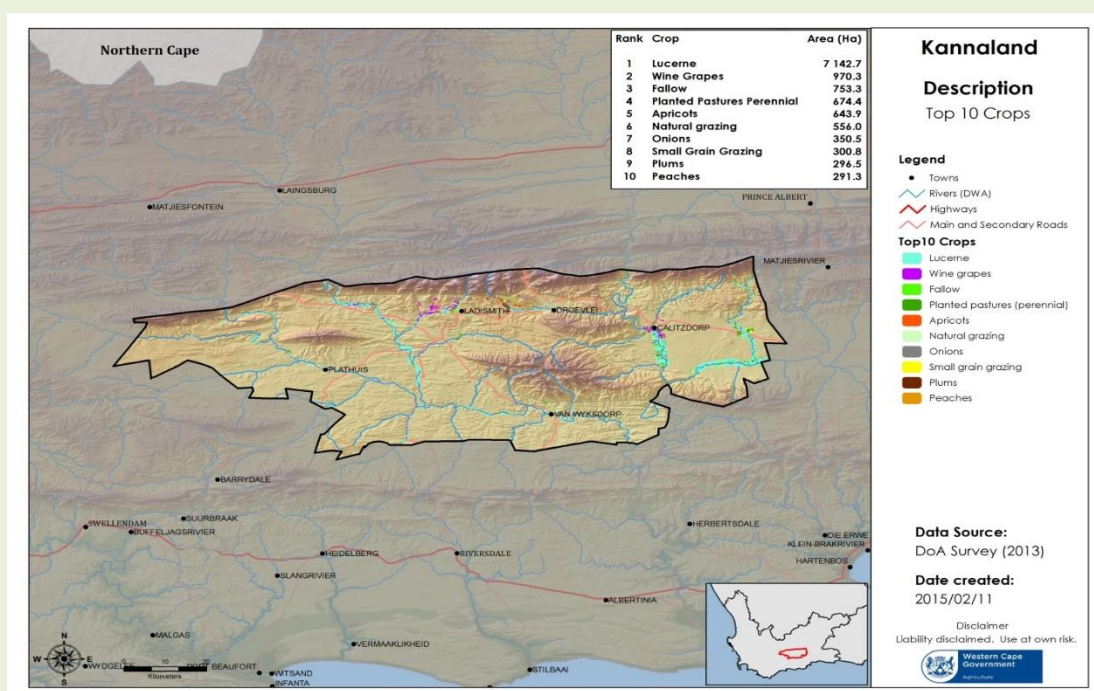


FIGURE 22: DOA SURVEY 2013

3.3.17 Spatial Alignment

A Municipal Spatial Development Framework (MSDF) is a long-term development strategy required in terms of the Municipal Systems Act 32 of 2000 and forms part of the Integrated Development Plan (IDP). The main aim of the MSDF is to clearly outline the spatial status quo of the Municipality, identify the opportunities and threats and then set out the local authority's goal, strategies and supporting policies in achieving medium - and long-term growth. It must give spatial expression on the Municipality's service delivery and development agenda. Furthermore, it clarifies and directs development and management activities in urban and rural areas in alignment with National and Provincial spatial planning legislation.

3.3.17.1 Legislation Regulating Municipal Spatial Development Frameworks

A host of new planning legislation applicable to MSDFs has been brought into operation since 2014, starting with the introduction of the National Spatial Planning and Land Use Management Act (SPLUMA) in 2013. SPLUMA, in conjunction with various other pieces of legislation (listed hereunder), have effectively replaced the former Western Cape Land Use Planning Ordinance, 1985, and now guide spatial planning and land use management in the Republic.

The Spatial Development Framework (SDF) is the 20 year Development Plan for Kannaland Municipality was reviewed and adopted by the Kannaland Council (during the 2013/2014 financial year). As the Municipality does not have an in-house spatial planner and was unable to obtain budget resources to procure a service provider, the review and updating of the SDF has not been completed. The Municipality will engage with the Eden District Municipality and the Provincial government to obtain resources to review and update the SDF during the 2017/18 financial year. For the purpose of the IDP, the approved SDF will be used as a basis for alignment even though the projects identified in the SDF may be misaligned with the IDP and the Budget.

The Kannaland SDF makes specific recommendations concerning the following elements:

- Bio–regions;
- Spatial Planning Categories (SPCs) for Land Use Management;
- Sustaining the economy;
- Major infrastructure projects;
- Major Tourism Destinations;
- Land Reform;
- Urban Related Development;

- Climate change;
- Urban design guidelines;
- Potential rural nodes and periodic rural markets; and
- Settlement hierarchy and structure.

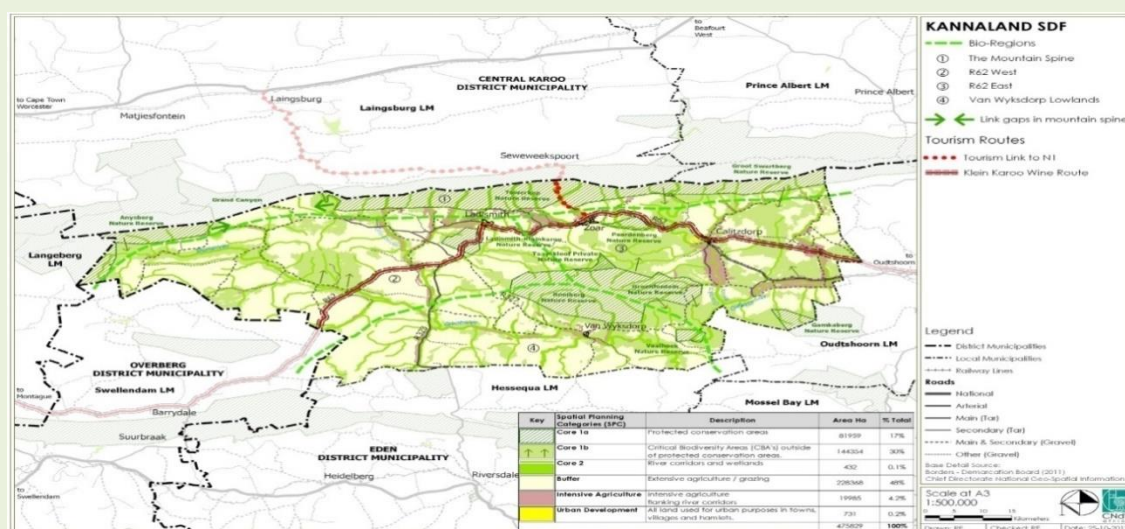


FIGURE 23: KANNALAND SDF – REFER TO FIGURE 5.3.1.1 IN SDF

The SDF must be revised every 5 years therefore the Kannaland Municipality should prioritise as well to source funding / support from the lead departments to amend and review the Municipal Special Development Plan during the 2018/19 financial year.

The following diagram illustrates the alignment of the sector plans with the Municipal Spatial Development Framework (MSDF). The ultimate objective of this one holistic planning approach which commences with development of an SDF (that is inclusive of all current and future developments) is to inform and align operational plans ensuring planning is streamlined across sector departments.



FIGURE 24: SDF ALIGNMENT WITH SECTOR PLANS

The current SDF outlines various catalytic projects for Kannaland spatially as well as future economic initiatives. The SDF is attached to this IDP (*It should be noted that the SDF will be updated and reviewed as soon as the resources for doing so has been obtained*). Throughout this IDP projects are being promoted which will be initiated as per listed financial years.

The SDF put forward spatial proposals for:

- Rural Areas (natural environment, agricultural areas and land reform)
- Tourism
- Urban related development

The SDF identified that the rural areas of the Kannaland Municipality should be classified per Spatial Planning Categories (SPC's). These include:

- Indicate areas like corridors on zoning maps and other planning maps to ensure their preservation and protect these areas from undesirable land uses.
- Overgrazing should be discouraged and the eradication of alien plant species promoted.
- Environmental management plans need to be formulated as apriority.
- The Kannaland Municipality should market the proposed ecological corridors and accordingly implement land use control over these areas.

- In terms of tourism the following goals are provided:
- Develop tourism in a sustainable manner for the benefit of all in the municipality.
- Promote tourism in order to create jobs.
- Increase disposable income levels of community members through increased tourism opportunities.

A complete review of the Kannaland MSDF is planned for the 2017/18 financial year, leading in to 2018/19 financial year. The envisioned project time frame is 16 months, as stipulated by the Spatial Development Framework Guidelines 2014, compiled by the National Department of Rural Development and Land Reform (DRDLR).

The review will aim to ensure compliance with the procedural as well as content requirements in terms of all the applicable legislation. Tender specifications are current will rolled out for the appointment of a specialist team of consultants to head the review, consisting of town planners, engineers, environmental practitioners, economists and GIS professionals.

The current status of the MSDF illustrates a misalignment of the objectives in the IDP as well the proposed projects for the outer financial years. However below is a diagram where the MSDF's objectives is linked to the current IDP Objectives (2017-2022).

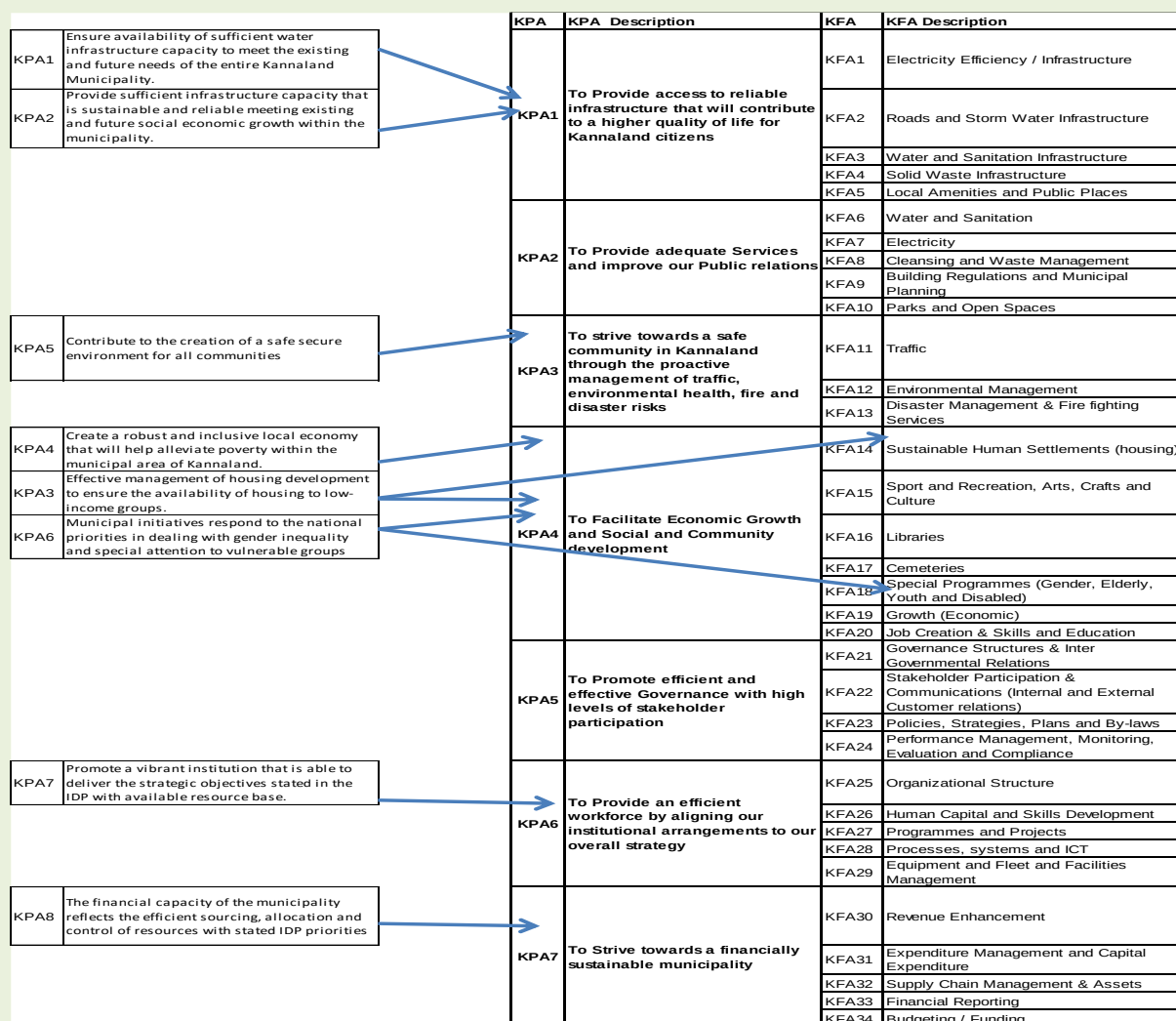


FIGURE 25: OBJECTIVES LINKAGE

3.3.17.2 Bio-Regions

The SDF identifies key structuring elements that can help to distinguish different bio-regions according to the patterns of the natural environment, social economy and built infrastructure of the municipality. Four bio- regions have been identified:

- The Mountain Spine
- S1 Encourage closing of the gap between Anysberg and Klein Swartberg on the Kannaland side of boundary through donation or resort zone development in exchange for conservancy (similar to recent Grand Canyon process);

- S2 Promote protection of CBAs on lower slopes through stewardship and strictly controlled wilderness tourism developments which should be informed by design guidelines to minimize visual and ecological impacts.

R62 West

- Increase brand marketing of R62 with public facilitation and resources where possible;
- Intensive farming areas should enjoy the highest level of protection, particularly where they are in easy transport access of settlements;
- Promote protection of CBAs along river corridors and on the Touwsberg through stewardship and strictly controlled wilderness tourism developments to be informed by design guidelines to minimize visual and ecological impacts.

R62 East

- Increase brand marketing of R62 with public facilitation and resources where possible;
- Incentivise and promote Zoar and Amalienstein residents to take advantage of the tourism potential along the R62;
- Ensure all future BNG housing does not detract from the visual quality of the settlement;
- Intensive farming areas should enjoy the highest level of protection, particularly where they are in easy transport access of settlements.

3.3.17.3 Spatial Planning Categories For Land Use Management

The Spatial Planning Categories provide the basis for managing rural land uses. The general conditions guiding what activities may occur within each category are generally in accordance with

- Core 1a Formally protected conservation areas
- Core 1b Critical Biodiversity Areas
- Core 2 River corridors and wetlands

Urban Areas

This includes the areas that are or will be used for urban related activities. All these areas should be included in a defined Urban Edge. These include the settlements of:

- Ladismith;
- Calitzdorp;
- Zoar; and,
- Van Wyksdorp

Rural Nodes

- Hoeko
- Voorwaart;
- Warmbad; and,
- Dankoord.

Extractive Industry

These include all mining activities in the Municipality. The promotion of settlements at mines should not be encouraged. The labour force to support mines should be accommodated in the existing urban areas or proposed rural nodes (if found viable).

Wind and Solar Energy Generation

These include all wind and solar energy generation facilities. These facilities should be promoted to support the supply of electricity in the municipality and the provision of basic services to those in need. These projects are to be sensitively placed to not negatively impact on the surrounding urban, agricultural or natural environment (see Section

Sustaining the Economy

Although Kannaland faces major poverty and employment challenges it is a well-resourced municipality compared to many other including in the Western Cape. These resources include:

· Almost all of the municipality can be considered to be an area of outstanding natural beauty and bio-diversity significance with great appeal to the wilderness and adventure tourism market:

- Eco-resorts and getaways;
- Hiking;
- Bird-watching;
- Organised and informal mountain biking; and
- Self-drive and motorcycle touring;

- Agriculture and its associated industries including wine and dairy represent another tourism market;

The heritage and urban environment of the settlement are a third, with particular attention being paid to the upgrading of Zoar and Van Wyksdorp with their potential appeal to the cultural tourism market; As mentioned previously, it is important that public housing projects are designed and laid out so that they enhance rather than undermine this potential; The municipality should be considered fortunate in that major beneficiation of agricultural products in the form of cheese, dairy, wine and port occurs at processing plants and wineries within its boundaries rather than the raw material being exported to value adding enterprises elsewhere.

These secondary economic sectors require higher staffing skills and hence have the potential to encourage improved human resource levels and incomes.

However, the current infrastructure shortfalls need to be urgently addressed, either directly or through the promotion of alternative technologies; as well as infrastructure these enterprises also require that the underlying resource of good agricultural land, especially that used for irrigation farming is kept intact and where possible extended. Urban development and other uses which could destroy this resource should be located where it is not necessary to take land out of production; and, it is essential that access to all these economic sectors, agriculture, manufacturing and tourism be broadened through land reform, mentoring and entrepreneurial development projects.

3.3.17.4 Major Infrastructure Projects (as per SDF)

The following projects should be considered:

- Implement a multi-pronged water management strategy;
- Rainwater harvesting;
- Grey water recycling;
- Reducing unaccounted for water;
- Extension of regional water service delivery; and,
- Water demand management for large users.
- Promote domestic and large scale solar energy usage and projects such as wind and solar farms subject to appropriate guidelines and siting principles.

Tree Planting and Paving

Tree planting is one of the cheapest forms of urban upgrading with the greatest positive visual impact. This can be done together with upgrading of roads per town as identified through this document. The ideal is to make our towns more green friendly and will result in attracting visitors and possible investment.



The tree planting and paving projects can initially form part of the Extended Public Works Program (EPWP). They are labour intensive and cost effective. For example, broken bricks can be used for paving or pavers can be made on site. Planting trees helps prevent soil erosion, stabilizes coastlines and increases land fertility.

Trees also serve a role in water regulation: They can help stave off damage during flooding as well as conserve water during droughts.



3.3.18 Major Tourism Destinations

Ladismith, Calitzdorp and van Wyksdorp B&Bs, guesthouses, restaurants and places of interest;

- Cheese factory shops;
- Public and Private nature reserves and eco-resorts for hiking and MTB;
- Port and Wine Cellars;
- Scenic routes for self-drive and guided tours, especially Seweweeks Poort, R62, R327 and district road from Ladismith to Calitzdorp via Van Wyksdorp;
- Potential mission route and cultural tourism opportunities including Lutheran mission complex and church in Ladismith, SA Mission society church in Zoar and Berlin Mission Society church in Amalienstein;
- Zoar as potential cultural tourism centre along Hoof Street with B&Bs and cafes and Amalienstein mission as termination of Seweweeks Poort pass;
- Ensure that new development responds positively to the layout of historic settlements; and,

- There are no cultural landscapes with the Eden district which have any formal protection status. Various examples of representative cultural landscapes were identified in the Heritage and Scenic Resources:

3.3.18.1 Land Reform

- Land reform opportunities should not be targeted only at agricultural operations although this will always be the major activity;
- Bio-diversity conservation and eco and agri-tourism operations should also be considered; and,
- Future land reform projects should carefully consider the context in which they are located and then seek to take advantage of that area's opportunities, not only in agriculture.

3.3.18.2 Settlement Guidelines

Walking Distance as the Primary Measure of Access

The need to ensure that people have access to a variety of opportunities is implied in a number of the DFA principles (S3(c)(i), (iii)). This requires an understanding of the relationships between different activities in terms of spatial proximity (close and far), access and time. In the past accessibility has usually been considered in terms of travel time in private vehicles, however, this measurement is not only environmentally unsustainable, as it is mostly dependent on access to private motor vehicles but also reflects a denial of the reality that the majority of our citizens do not have private vehicles, may not always be able to afford public transport and thus have to spend significant time and energy walking to fulfil their needs. Thus appropriate walking distance should always be used as the measure for accessibility.

Land use integration and interface

The implementation of the walking distance principle to promote greater access to opportunities for all people, will require the functional integration.

Socio-Economic Integration

The principle of access and integration, also requires socio-economic integration (DFA principle S3(c) (i),(vii)). Little progress has been made in this regard since the advent of democracy. In reality there is often community resistance to integration of poor, middle and high income communities, and bank valuers often downgrade property values where informal settlements or low income housing is provided in close proximity to middle and high income housing.

The use of a socio-economic gradient with relatively small differences in income and property value between adjacent communities can help mediate this problem.

In particular efforts should be made to locate low income neighbourhoods nearer to the core or nodes of settlements and away from the periphery.

Intensification Corridors and Linkages

Principles:

- Sensitive infill and redevelopment of major arterial axis in clearly defined precincts;
- Corridors to concentrate activities and support its speedy initiation especially in more rural areas, should be delineated to include one erf on either side of the identified street, otherwise called the spine of the corridor;
- Show sensitivity towards existing heritage buildings;
- Enhance the street experience through landscaping and guiding the architecture of new developments;
- Encourage a multiple level of entry into the economic market and enhance job creation, the intensification corridors should be limited to residential, office and retail uses and only compatible light industrial uses, e.g. non-nuisance manufacturing or craft activities that may require a retail outlet on the same premises;
- Define a single uniting structure of intensification corridors, nodes and linkages between town and township; and,
- Encourage supporting densification pattern and infrastructure provision.

Sub-centre Nodes

Three levels of hierarchy of urban nodes containing business and community facilities shall be clustered together as far as possible to provide satisfactory access and clustering of activities

- Primary: primary schools, crèches, clinics, bus and mini-bus taxi stops; and,
- Secondary: high schools, day care centres, hospitals, libraries, sports and community halls, sports fields;

Nodes should be managed to concentrate the business therein and where growth is required, the node should be encouraged to grow along the corridor towards each other. This is to manage and prioritise in a strategic manner, the implementation of needed infrastructure and to provide the greatest opportunity of success of these businesses.

Urban Edge

These should be reviewed to ensure that:

- Sufficient protection is given to land requiring protection, inter alia, the agricultural land currently under cultivation and CBAs;
- That compaction rather than expansion of urban settlements is encouraged to promote non-motorised transport modes where appropriate;
- Urban Edges which provide sufficient land for the development of the needs of the area for about 20 years, given the current growth rate, is proposed around the exiting urban footprint; and,
- It is proposed that these urban edges only be realigned based on actual need and once all the existing under or unutilized vacant land has been developed.

Infill, Densification and the Suburbs

It is clear that significant infill and densification is required in order to restructure the settlements in the Municipality. Well located land has been identified to contribute to this important goal.

Wind and Solar Farm Siting Principles

The following wind farm siting principles are proposed to be used as a first set of questions to guide potential developers of wind and solar farms. Terrain suitability need to be investigated and should include the following typical aspects in the design process:

- Slopes by gradient classes;
- Rocky areas;
- Soil type and permeability; and,
- Natural watercourses and areas with high water table, Rainfall data; and
- Vegetation.

Infrastructure

The following principles shall apply:

- Ensure a base level of services only is available for all residents in the Municipality including those households qualifying for indigent grants;
- Where possible implement GAP housing schemes as part of subsidy projects so as to help cross-subsidise required infrastructure projects;

- For low density settlements, where the high cost of conventional grid services are prohibited and not preferred and to promote sustainable use of natural resources reduce dependency on conventional grid services,

The following are proposed:

- Promote the use of solar hot water projects so as to help cross-subsidise infrastructure costs;
- Promote use of solar of water heaters, PV panels, grey-water recycling, waste separation at source, and passive building design to as to minimize energy, solid waste and water demand, see Figures (a) and (b); and,
- Encourage rainwater harvesting and grey water (water from hand basins and kitchen sinks) recycling,

Land use restrictions are set:

- Height:
- Setback
- Site Development Plan (SDP)
- Visual and environmental impact
- Finishing and Colour

Urban Design Guidelines

Create open space systems that integrate the elements of a settlement to contribute to a meaningful urban structure. This can be done by:

- Providing connectivity between open spaces;
- Establishing linkages between open spaces;
- Aligning the open space system with public buildings; and
- Ensuring an improved quality of linkages through the continuation of special activities or functions along major routes.
- Locating buildings around open spaces and streets so that sufficient enclosure is created;
- The appropriate height of buildings; and
- Locating the highest buildings to the southern side of the open space, with lower buildings or trees on the northern side.
- Concentrate intensive activities along major vehicular and public transport routes;
- Locate majority of public buildings and increase densities along these routes; and

- Locate buildings closer rather than further from the streets to increase pedestrian activity, a sense of enclosure and surveillance.

Potential Rural Nodes and Periodic Rural Markets

The potential of rural nodes is derived from the rural economic opportunities that are generated by their location and “attracting force”. However, in some nodes these forces are so small that permanent infrastructure or services cannot justify permanent buildings or staff. Initially, these nodes, can be supported through periodic markets at which mobile services, for instance, home affairs, pension pay outs, clinics, libraries can be dispensed.

This approach could be applied at settlements with low threshold populations to ensure that the necessary services can be provided. Where such facilities do not exist, periodic service centres should be established for coordinated use by a wide variety of government, nongovernment and private organisations.

These periodic service centres should be located at points of highest access according to the same principles. The services of various government departments and private sector organisations should be co-ordinated into a mobile caravan of dedicated buses and vans which travels from periodic service centre to periodic service centre stopping for morning or afternoon sessions as appropriate.

Local arts and crafts people and business people should be encouraged to trade in the stop-over periods of the mobile service caravans at the periodic service centre. The location of shops and abattoirs should also be encouraged here. This strategy should be considered for Zoar, Amalienstein and Van Wyksdorp.

- There is potential for fruit processing and manufacturing
- Agri tourism needs to be promoted
- We are ashamed of the town because it is dirty.
- A money problem cannot be solved with money. What you have needs to be managed correctly.
- There is no culture of transparency in the municipality. We do not see how the money the municipality receives is spent.

Settlement Hierarchy and Structure

Kannaland Municipality's settlement hierarchy and structure comprises the following settlements along the R62:

- Ladismith has the largest population and number of economic activities, including manufacturing;
- Calitzdorp and Zoar has a higher population but far less economic activity than the former; and,
- Van Wyksdorp is isolated from the main settlement system along the R62. It is tucked away to the south at the foot of the Rooiberg near the Groot River.

Integrated Human Settlements

The Department of Human Settlement assisted the municipality to develop a draft Human Settlement Plan which will manage the overall housing projects in the municipal areas. The purpose of this Human Settlement Plan is to feed into the Provincial Multi Year Housing plan. To establish a medium to longer term (i.e. 20 year) strategy for the development of integrated and sustainable human settlements within the municipality's area of jurisdiction.

To identify specific priority projects emanating from these programs for which more detailed planning is required to implement them. Furthermore, this draft HSP guideline will assist the local municipality in the following:

- Guiding the vision of municipality.
- Delivering integrated and sustainable human settlements through the compilation of credible HSPs.
- Drawing linkages with the IDP process with adequate information about the housing projects, their benefits, parameters as well as strategic and operational requirements.
- Ensuring that the contents and process requirements of planning for sustainable human settlement development are adequately catered for.

The municipality has developed a draft housing selection policy which was finalized in 2013/14 financial year. This policy regulates the housing waiting list and the allocation of housing. This policy also enables the council to determine the demand for housing in both rural and urban areas.

Aside from this long term strategic planning, the municipality plans to facilitate the transfer of Rural Development Programme (RDP) IRDP houses in Ladismith. The Subdivisions have been registered with the Surveyor General and have been included in the general plan of the town. The provision of

human settlements is a high priority for the municipality. Challenges do exist with regard to the capacity of bulk infrastructure services with specific reference to waste water treatment works and water works. This has delayed the delivery of human settlements over the past few years which has resulted in the significant increase in the housing waiting list.

A Housing Pipeline was developed to assess the demand for low and middle income groups housing in Kannaland. Given the high unemployment in towns and the agricultural nature of the local economy which is affected by the national and international trends toward a magnetization of the agricultural sector has resulted in a significant increase in the demand for low cost housing. The non-availability of homes for the middle income grouping which consisting of municipal workers, nurses, teachers, government officials, and ordinary factory workers and policemen has highlighted the demand for GAP housing.

Given the demand for low and middle income earners settlements, there is a serious need for a credible Human Settlement Plan. The plan will ensure long term planning with regard to the delivery of the appropriate infrastructure that will enable the municipality to address the backlog for low cost housing and make land available for GAP housing. A portion of GAP housing is also subsidised by the Department of Human Settlements depending on the salary bracket.

Given the expectation of economic growth resulting from water security and the ancillary job-creation prospect of the proposed dam and its construction, the provision of affordable housing and its supporting infrastructure, such as water, electricity, sanitation, sewerage, and roads are foremost in creating a sound and sustainable cradle for continuing development and growth.

The Subdivisions have been registered with the Surveyor General and have been included in the general plan of the town. A housing need of 480 household was identified in Zoar and the municipality is currently in process in completing 44 top structures. In additional 32 identified vandalised houses will be rectified in due course. A housing need of 100 households has been identified in Van Wyksdorp. Once the reservoirs have been upgraded, the water capacity for this area will be sufficient to accommodate further house projects.

The table below displays the current housing demand within the Kannaland Municipality. It's evident that Ladismith has the highest demand for housing opportunities.

Town	Housing classification of housing demand list					Current demand	HS
	Gap	Farms	Shacks	Backyard dwellers	Residents currently at parents		
Ladismith	92	117	206	269	577	1321	
Zoar	45	100	45	20	335	545	
Calitzdorp	116	311	28	182	456	1093	
Van Wyksdorp	5	1	27	61	32	126	
Total						3085	

TABLE 11: HOUSING DEMAND LIST - HUMAN SETTLEMENT PLAN

Kannaland Municipality faces a small human settlements challenge in comparison to the rest of the region, although the level of service of their housing stock is generally poor. The housing backlog is a significant proportion of the total population of the municipality. Approximately 15% of households are inadequately housed and 67% earn less than R3 500 per month. The majority of the housing backlog occurs where the average household earning is less than R7 500 per month.

There are relatively few houses that are in the supply and acclaim gaps. Over the past financial years there has been an increase of informal settlements and informal dwellings, thus the municipality acknowledges that housing and access to economic opportunities is a high priority for this municipality.

The recent informal settlement shack count and verification study conducted by the province to gather necessary planning and prioritisation information on the numbers, level of services, density and living conditions within the informal settlements geared towards informing municipalities of current status of the informal settlement within the municipal area. The information presented in below was extracted from the study:

Towns	No of shacks
Ladismith	206
Zoar	45
Calitzdorp	28
Van Wyksdorp	27
Total	306

TABLE 12: INFORMAL SHACK COUNT - HUMAN SETTLEMENT DEMAND PROFILE

Human Settlement Pipeline Projects:

Project Name/Description	Programme	Total No of Housing Opportunities	Earliest Implementation Year
3314 : Ladismith Parkmaat (280 services & 280 units) IRDP	IRDP	422 - EIA in Process	2018-19
3315 : Ladismith Schoongezicht GAP (170 services & 170 units) IRDP	IRDP	40 On Hold	2018-19
3316 : Ladismith Showgrounds GAP (350 services & 350 units) IRDP	IRDP	350 On Hold	2018-19
3320 : Ladismith Middleton Street Site GAP (78 services & 78 units) IRDP	IRDP	78 less	2018-19
3322 : Zoar Protea Park Infill (44 services & 44 units) IRDP	IRDP	44	2015- 16
3323 : Zoar Protea Park Rectification (100 units) RP	RP	44	2015-16 / 2016-17
3321 : Zoar Protea Park Infill (100 units) IRDP	IRDP	100	2020-21
2703/1128 : Calitzdorp Bergsig (671 services & 671 units) IRDP	IRDP	692	2014/15 Remainder to move to 2018-19 due to bulk
Calitzdorp Old Hospital Site (150 units) SH	Social Housing	150	2018-19
3324 : VanWyksdorp Rembrandt Erf 110 (100 services & 100 units) IRDP	IRDP	100	2020-21

TABLE 13: SUMMARY OF CURRENT HUMAN SETTLEMENTS PIPELINE PROJECTS

3.3.18.3 Thusong Centre

The Thusong Service Centre in Ladismith which serve the Kannaland area with regards of government offices.

The location was chosen due to the proximity to existing bulk infrastructure.

Thusong outreach programs is currently conducted in partnership with other lead departments thus to educate the community on current and future programmes.



Outreach Program



Chapter 4: Governance and Institutional Structures

4.1 Political Structure

4.1.1 Municipal Council

The Council is the ultimate decision-making authority. Decisions to approve or amend the Municipality's integrated development plan (IDP) may not be delegated and have to be taken by the full Council.

4.1.2 Executive Mayor

In terms of the Municipal Systems Act and the Municipal Finance Management Act the Executive Mayor must:

- manage the drafting of the IDP;
- assign responsibilities in this regard to the municipal manager;
- submit the draft plan to the municipal council for adoption; and
- co-ordinate the annual revision of the IDP and determine how the IDP is to be taken into account or revised for the purposes of the budget.

4.1.3 Ward Committees

The role of the Ward Committees with respect to the IDP is to –

- assist the ward councillor (who is the chairperson) in identifying challenges and needs of residents;
- provide a mechanism for discussion and negotiation between different stakeholders in the ward;
- interact with other forums and organisations on matters affecting the ward;
- draw up a ward plan that offers suggestions on how to improve service delivery in the particular ward;
- disseminate information in the ward; and
- monitor the implementation process concerning its area.

4.1.4 Political Parties

The political oversight role resides within the Municipal Council. In terms of the Sections 79 and 80 of the Municipal Structure Act (Act 117 of 1998). The Municipal Council comprises of three political parties namely:

- African National Congress (ANC);
- Democratic Alliance (DA); and
- Independent Civic Organisation of South Africa (ICOSA).

4.1.5 Councilors

Council consist of 7 councillors:

- Executive Mayor
- Deputy Mayor
- Speaker
- Ward Councillors (4)

	Position	Party	Wards
	EXECUTVE MAYOR Councillor Magdalena Barry	ANC	Ward 3:
	SPEAKER Councillor Alletta Theron	DA	Ward 4

	DEPUTY MAYOR Councillor: Phillipus Antonie	PR Councillor	ANC	Ward 3
	Councillor Hyrin Ruiters	PR Councillor	ICOSA	Ward 3
	CHIEF WHIP Councillor Werner Meshoa	Ward Councillor	ICOSA	Ward 2
	Councillor Jeffrey Donson	Ward Councillor	ICOSA	Ward 1

				
	Councillor Joshlyn Johnson	PR Councillor	DA	Ward 3

TABLE 14: COUNCILLORS

4.1.6 Mayoral Committee

The Mayoral Committee is the advisory body of the Council. The Mayoral Committee comprises of the Executive Mayor, Executive Deputy Mayor and the Speaker.

4.1.7 Oversight Structures

4.1.7.1 Municipal Public Accounts Committee (MPAC)

The committee was established in May 2015 (27th of May 2015) which replaced the Oversight Committee. The Municipal Public Accounts Committee is a committee of municipal Council appointed in accordance with section 79 of the Structures Act. This committee focuses mainly on compliance in accordance with of the Local Government: Municipal Finance Management Act, 2003. The MPAC furthermore exercise oversight over the executive functionaries of Council and ensure good governance in the Municipality. The terms of reference of the MPAC are as follows:

- Investigate unforeseen and avoidable expenditure (Section 29 of MFMA)
- Investigate unauthorised, irregular or fruitless and wasteful expenditure (MFMA Sec 32)
- Review the quarterly report of the Mayor on the implementation of the budget and the state of affairs of the municipality – SDBIP (Section 52 (d) of MFMA)
- Review the monthly budget statements (Section 71 of MFMA)
- Review the mid-year budget and performance assessment (Section 72 of MFMA)
- Ensure disclosure of Councillors, Directors and Officials. (Section 124 of MFMA)
- Review of Financial Statements before the submission to the Auditor General (AG) (Section 126 of MFMA)
- Review and give recommendation on the Submission of Annual Report (MFMA Sec 127)
- Present an oversight report on the Annual Report (Section 129 of MFMA)

- Ensure that issues raised by AG are addressed. (Section 131 of MFMA)
- Ensure the function of the Audit Committee (Section 166 of MFMA)
- Ensure that disciplinary action instituted against Councillors, the Municipal Manager and Senior Management is within the guidelines of the MFMA financial misconduct regulations. Review the IDP (Section 25 of MFMA)
- Annual Review of the IDP (Section 34 of MFMA)
- Review the performance management plan (Section 39 of MFMA)
- Monitor that the Annual Budget is aligned with the IDP (Regulation 6 of the LG: Municipal planning and performance regulations)
- Monitor that all declaration of interests forms are completed by Councillors and relevant municipal staff (Section 54 – read with item 7 of schedule 1)

Name	Position
P Antonie	Chairperson
J Donson	Councillor
J Johnson	Councillor

TABLE 15: MPAC

4.1.7.2 Audit and Performance Committee

It should be noted that this committee still needs to be established. resourced, more powerful and taken seriously.

4.1.7.3 Administrative Structure

The Administrative structure still needs to be reviewed, job descriptions drafted and evaluated and staff placed in the correct job at the correct level.



FIGURE 26: TOP STRUCTURE
ORGANOGRAM

MUNICIPAL MANAGER



Acting Municipal Manager - Petro Allan Williams

The municipal manager is responsible for the design and execution of all arrangements regarding the compilation and implementation of the IDP. The municipal Manager is, subject to the policy directions of the municipal council, responsible and accountable for-

- the implementation of the IDP and the monitoring of progress with implementation of the plan; and
- the formation and development of an administration equipped to carry out the task of implementing the IDP.

HEADS OF DEPARTMENTS AND OFFICIALS

Their role is to -

- provide relevant technical, sector and financial information for analysis for determining priority issues;
- contribute technical expertise in the consideration and finalisation of strategies and identification of projects; and provide departmental operational and capital budgetary information.

MACRO ADMINISTRATION STRUCTURE – TOP MANAGEMENT TEAM



Acting Executive Manager: Financial Services – Jacobus Alwyn van Niekerk

**Executive Manager: Corporate Services - Hendrik Barnard**

Senior Management

Office of the Municipal Manager	
Mr PA Williams - Municipal Manager (Acting)	
Office of the Municipal Manager	Mr R Timmie - Town Coordinator - Calitzdorp
Office of the Municipal Manager	Mr R Meyers - Manager: IT
Strategic Services	Vacant - Senior Manager: Strategic Services
Corporate Services	Mr H B Barnard - Executive Manager: Corporate Services
Corporate Services	Mr C Hendricks - Manager: Thusong Centre
Corporate Services	Vacant - Manager: Administration
Corporate Services	Vacant - Manager: Housing
Corporate Services	G Breda - Acting Manager: Legal Services
Corporate Services	Mr M Makier: Human Resource Management
Technical Services	Vacant - Senior Manager: Technical Services
Technical Services	Mr L Blignault - Manager: Acting Manager Technical Services
Technical Services	Mr I Buys: Manager Electrical and Mechanical Services
Finance	Mr JA van Niekerk - CFO: Financial Services
Finance	Vacant - Senior Manager: Budget Office
Finance	Mr M Scaffers - Manager: Assets

TABLE 16: SENIOR MANAGEMENT

4.1.7.4 Committee Services

This section is a support function to Council and all internal committees and is situated in the Department of Corporate Services. The agendas and minutes of all Council meetings are compiled within this section; it is a challenge to fulfil this function to adhere to the Bylaw on Municipal Council's Rules of Order for Internal Arrangements. Training in report writing and taking of minutes is needed for the staff to deliver an excellent service for the Council, Mayco and the Committees.

Chapter 5: Strategic Thrust

5.1 High Level SWOT Analysis

As part of the development of its new 5-Year IDP, the Municipality conducted a very thorough Institutional SWOT Analysis during October-November 2016, of which the results were discussed at subsequent Management Meetings, as well as at IDP Stakeholder Engagements held in April 2017. The following weaknesses were identified as the top problematic areas and deserving of focused and urgent attention or intervention:

- Small revenue base
- Delay in finalizing staff establishment and placement process
- Poor safeguarding of assets and poor fleet management
- Ageing infrastructure and poor maintenance of assets
- Limited revenue collection, poor Credit Control
- Poor law enforcement, application of by-laws
- Lack of capacity in some Departments

	STRENGTHS	WEAKNESSES
INTERNATIONAL FAC	• Support with shared services through District, Inter-municipal and Provincial Shared Services. • Close cooperation on management level through regular extended management meetings weekly. • Situated in close proximity to major towns within the Eden district and towns in other districts who share the same challenges and opportunities. • Three Game Reserves.	• Weak tax bases and poor payment record amongst rate payers. • Financial constraints caused by historical poor payment record for services and areas such as Zoar which previously suffered from uncertainty about service delivery responsibilities and mandates. • Little or no foreign investment due to weak infrastructure, ineffective marketing strategy. • Poor roads and public infrastructure due to lack of funds for operation and a lack of maintenance

T O R S	• Fertile agriculture soil. • Heritage Tourism. • Stable political environment. ➤ Flourishing hospitality trade. ➤ Good interaction and communication between Council and community. ➤ A major arterial road (Route 62 and sub roads) connecting Kannaland to Oudtshoorn, Barrydale, Riversdale and Laingsburg.	plans. • High level of illiteracy and a low skills base, lack of qualified tradesmen. • High Dependence on grants.
	O PPORTUNITIES	T HREATS
E X T E R N A L F A C T O R	• To develop into the agriculture hub of the Eden district. • To develop the Tourism trade along Route 62 • Foreign investment in farming • Expanded Public Works Program (EPWP) for job creation	• Dependency of municipality on Government Grants • Water scarcity, especially in rural areas • Global warming and climate change • Increasing prevalence of HIV/Aids and Tuberculosis • High level of unemployment and seasonality of employment • High Poverty index ➤ High volume of stale consumer debt

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TABLE 17: SWOT ANALYSIS

As an institution Kannaland Municipality realised that to achieve growth and the development it must embrace the principles of sustainable development as adopted in the world forum on sustainable development. The principles focus on the following:

People: Development must be focused on human development. This means that the people must lead a long, healthy life, be equipped with knowledge and skills and earn a decent income to have a decent life.

Economy: Economic growth becomes an important variable in the sustainability equation. Growing the local economy will enable the Municipality to provide services on a sustainable manner especially to the poor.

Environment: the living generation should ensure that they don't deplete natural resources. The living should reserve and conserve resources for future generations and care for biodiversity and the ecosystem.

The purpose of this section is to align the IDP strategies with the IDP priority areas, key performance indicators and strategic interventions. To achieve the Municipal vision following developmental priorities were identified as main drivers of development. The identification of these priorities was informed by the municipal challenges, the District Growth Development strategy and the local government strategic agenda.

It is important for council to plan for the five-year cycle based on its strategic priorities and community needs and to reflect on how these will be addressed.

It should be noted that the following priorities have been clustered and which the main purpose will be to focus on for a sustainable municipality and good basic services for the next five years:

Economic development -	Agriculture, SMME, Art and Culture and Tourism
Human Development -	Education, skills and information support, social development
Sustainable services -	Effective use of resources, infrastructure and community development
Financial Health -	Financial reporting, IDP and PMS

5.2 Strategic Priorities

Kannaland Municipality developed strategic priorities (KPA's), objectives and strategies in order to achieve the outcomes in its mission statement, however, achieving the outcomes remain a challenge. Effective intergovernmental relations will overcome the challenge posed by historical mediocre performance of government departments to achieve outcomes developed on paper. Taking into consideration political, national, and provincial and district policies, Kannaland Municipality adopted the following seven (7) Strategic Priorities (KPA's):

KPA 1: Reliable Infrastructure:

To provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens



KPA 2: Service Delivery:

To provide adequate services and improve our public relations



KPA 3: Safe Communities:

To strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks



KPA 4: Socio-Economic Development:

To facilitate economic growth and social and community development



KPA 5: Effective and Efficient Governance

To promote efficient and effective governance with high levels of stakeholder participation



KPA 6: Efficient Workforce

To provide an efficient workforce by aligning our institutional arrangements to our overall strategy



KPA 7: Financial Sustainability

To strive towards a financially sustainable municipality

The next step was to determine what must be done (Objective) to address the Priority Issue and how (Strategy) this will be achieved. This process is illustrated below:

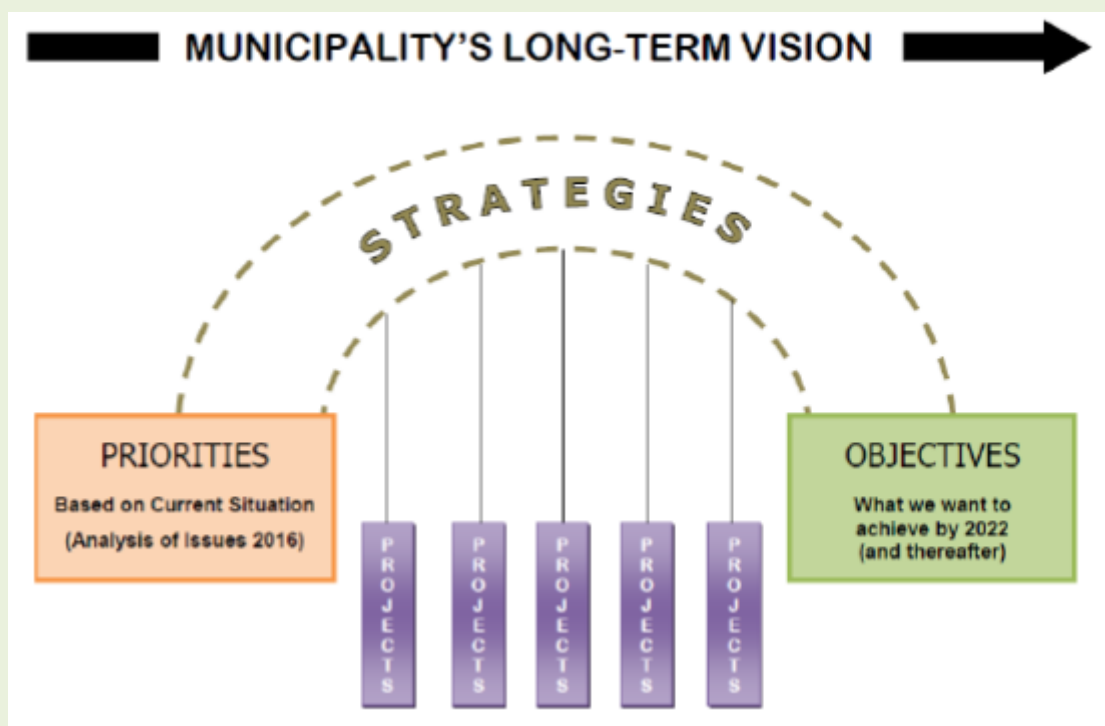


FIGURE 27: MUNICIPAL LONG TERM VISION ILLUSTRATION

The logical flow of Objectives and Strategies from each Development Priority's Problem Statement (Situation) and the resultant unpacking of Projects / programmes are comprehensively discussed below.

5.3 Implementation Strategy

Throughout this chapter each key performance area will be broken down to municipal objectives and to the programmes and projects Council intends to execute within this five year cycle. It should also be noted that most of the needs identified is already summarized in the prioritisation analysis in previous chapters of the IDP.

5.3.1 Key Performance Area 1: Reliable Infrastructure

Objective 1.1 - To provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens:

The Municipality realises that the achievement of its strategic objectives relies heavily on the establishment of proper infrastructure for basic service delivery and the maintenance thereof.

The Access to Basic Services has improved the accessibility in all informal and formal settlements although there are room for improvement. The municipality places a high priority on water and sanitation services and to expand, refurbish or upgrade the infrastructure to meet future development requirements.

The municipality has emphasised the improvement for water security and quality and therefore business plans has been submitted to the Department of Water and Sanitation for the building of the New Proposed Swartberg Dam and Waste water treatment works in Ladismith and Zoar. The aim is to unlock business development potential, attract investment to the area and facilitate the implementation of residential development.

O - 1.1.A - Infrastructure Planning programme

Projects Identified by Communities

During the Public Participation Process, the following issues were raised:

Ward	Issue
Ward 1:	• Upgrading of storm water pipes. • Play parks for children. • Taxi / bus stop for patients at the community hall (shelter to patients when waiting on ambulances). • Paving of roads – Die Baan and Sakkiesbaai. • High mass lights in Sakkiesbaai, Speed humps – Raubenheimer Street Van Riebeeck Straat, Donson Avenue and Van Erick Avenue. • Lightning on the R62 the entrance of Sakkies Baai. • Construction of a youth centum for Kannaland.
Ward 2:	• Upgrading of community and library hall in Bergsig. • Upgrading of a sport field. • Speed humps in Bergsig. • Upgrading and continuous cleansing of storm water pipes. • Speeding strips – “Cement Road” which enters the entrance of Calitzdorp on the R62.
Ward 3:	• Water availability, poor water infrastructure and service disruption communication.

Ward	Issue
	• Building of houses in Zoar. • Replacing of all asbestos roofs of houses. • Play parks for children in the Zoar area. • Cleansing of storm water pipes. • Taxi / bus stop for patients at the community hall (shelter to patients when waiting on ambulances). • Pedestrian crossing on the R62 for safety. • Repairs and maintenance of “lae-waterrug” in the entire Zoar area • Cleansing of sewage drains.
Ward 4:	• Streetlights in Van Wyksdorp. • Repair and maintain the storm water pipes. • Additional sports field. • Upgrading of roads. • Recycling of solid waste.

TABLE 18: PROGRAMMES, PROJECTS AND PERFORMANCE MANAGEMENT – PUBLIC PARTICIPATION PROCESS**O - 1.1.A.1 Integrated Municipal Infrastructure Plan Project**

The drafting of the Integrated Municipal Infrastructure Plan to eradicate any infrastructural backlogs is in process. MISA (Municipal Infrastructure Support Agent) has been appointed to complete this plan. The economic and financial analysis will be reviewed and adjusted in line with IMIP (Integrated Municipal Infrastructure Planning).

O - 1.1.B - Electricity Infrastructure Programme

Electricity is the main energy source of households within this municipal area. The Kannaland Municipality is responsible for the provision of electricity to Ladismith and Calitzdorp, whilst Zoar and Van Wyksdorp are supplied by ESKOM.

Kannaland infrastructure is out-dated and in need of urgent upgrade. The municipality has over the past four years invested in new infrastructure to ensure secured electricity distribution to businesses and the community and still intend to do so.

The electricity master plan of the municipality identified the need to develop an electricity master plan to evaluate and guide the operating and maintenance processes as well as to reduce losses in income due to aged failing, and the demands of new infrastructure.

Funding has been secured through the Department of Local Government and a service provider has been appointed to develop the electricity master plan for the municipality which will be in operation in the 2016/17 financial year.

Below are objectives that of the development of the master plan:

NARRATIVE SUMMARY		
Project Goal, impact and outcome	Goal,	The goal of the project is to develop an Electricity Distribution Network Plan for a ten (10) year period and a 20 year load growth projections in the form of a set of high, realistic and low growth scenarios.
Project Purpose		Guidance for funding applications both internally and externally in terms of the local municipality's future electrical requirements
Project Programme Outputs (s)	/	Facilitation of the future growth and upgrading needs of the municipality's medium and high voltage electricity distribution network.
Performance Indicators		Updated Electricity Master Plan and Asset Register linked to GIS network information.
Key Inputs / Activities	/	Identification of key current and potential stakeholders engaged in the energy sector with specific relevance to impact of renewables, Technical Desktop Data Collection, On-site asset verification and visual inspection, preparation of asset register linked to GIS network information, electricity demand forecasting and electricity master planning.

TABLE 19: ELECTRICITY MASTER PLAN SUMMARY

The municipality has applied for INEP((Integrated National Energy Programme) funding with the Department for electricity infrastructure upgrades.

YEAR 1: 2016/17	R 16 Million
YEAR 2: 2017/18	R13 Million
YEAR 3: 2018/19	R 8.7 Million

TABLE 20: PROPOSED FUNDING FOR ELECTRICITY UPGRADES

The current substation in Calitzdorp has an electricity usage capacity of 1.7 MVA and the availability of electricity is 1.2 MVA. It was identified that the current electricity supply should be upgraded to supply sufficient electricity to industries as well to human settlement developments.

The vision is also to maintain a green and healthy environment, and therefore it is a prime consideration to upgrade the low tension networks by placing the cable networks underground.

The following was identified as needs and will be prioritised for the outer financial years:

- Upgrading of new transformers and refurbishment of old transformers;
- Bulk supply to Ladismith and Calitzdorp – Upgrading of substations;
- Meter replacement of conventional to prepaid meters;
- Replacement of three phased prepaid meters;
- Electrification of informal areas throughout the Municipal area;
- Electricity connections to farm houses and or informal settlements
- Upgrading and refurbishment of infrastructure will result in a secure revenue stream as well as quality services delivered to the residents of Kannaland. The municipality's aim is to budget for the maintenance of all electrical upgrades.

And During the IDP Public Participation Process, the following needs were identified and will be prioritised to be addressed.

Ward	Issue
Ward 1:	Street lights in Hoeko needed
	Electrical Services to the residents in Hoeko needed
	Streetlights on the R62, Ladismith needed (entrance from Van Eyck laan to Sakkiesbaai)
	Streetlights on the Baan, Goldinglaan, Martin Gelderblom Street, Dr Hoffman Street, September Street and Ladismith needed
	Lightning in Sakkiesbaai (Pedestrians) needed
	Operation and Maintenance on all electricity infrastructure must be attended to throughout ward one
	Electricity services to informal areas
Ward 2:	Electricity for the entire housing project as well as high mass lights or street lights in Calitzdorp needed.
	High mass lights must be installed to provide light in the dark spots in Bergsig
	Installation of electricity for the new houses in Bergsig
	Street lights must be installed for light in the dark spots in Bergsig

Ward	Issue
	Electricity services to informal areas
Ward 3:	Lightning on the sports field needed
	Electricity services to informal areas
	Lightning throughout the Zoar resident area
	Lightning at the entrances of Zoar
Ward 4:	Street lights for areas that don't have street lights (Van Wyksdorp)
	Trimming of trees to avoid electricity failures and reduce losses

TABLE 21: ELECTRICITY EFFICIENTLY – PUBLIC PARTICIPATION PROCESS**O - 1.1.B.1 Electricity Demand Side Management Project**

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework			Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location
Electricity Demand Side Management Project	8, 000,000	13,000,000	18,796,000.00	1-4

TABLE 22: ELECTRICITY EFFICIENTLY – PUBLIC PARTICIPATION PROCESS

There are a number of national, provincial and local structures that either have a bearing on, or offer potential to contribute to local energy development. These are as follows:

Sphere	Organisation / Area of relevance for local energy development
National sphere	Policy, regulation, monitoring, funding, capacity support
Government departments	Department of Energy (SANEDI, SAGEN), Environment, Cooperative Government and Traditional Affairs (MIG, MISA), Trade and Industry (SANS), Public Works, Housing, Science and Technology, National Treasury (Green Cities, DORA, MFMA, ADAM, Transverse), Presidency (SIPS)
Government regulatory or parastatal	NERSA, Eskom
Provincial sphere	Representation in national sphere, strategy, monitoring,

	forum/networking, information support and capacity
Provinces	Relevant provincial departments (Economics, Environment, Local government)
Intergovernmental representation	South African Local Government Association (SALGA) Provincial Offices
District level	Shared services/capacity, forum/networking, strategy
District municipalities	
Intergovernmental representation	National department 'deployed' staff (DEA, DWS) and can host 'shared services'; DoE via INEP hosts District Energy Forums, AMEU branches, Eskom regional offices.
Local level	Strategy and implementation, technical and capacity support
Municipalities	
Technical and capacity support	National government: COGTA-MISA, academic institutions, range of private training organisations (e.g. CEM training); Municipal associations: South African Local Government Association (SALGA), Association of Municipal Utilities (AMEU), Institute for Municipal Engineers (IMESA); NGOs: SA Cities Network, Sustainable Energy Africa, ICLEI, National Business Initiative

TABLE 23: NATIONAL, PROVINCIAL AND LOCAL STRUCTURES FOR ENERGY DEVELOPMENT**O - 1.1.C - Road and Stormwater Infrastructure Programme**

During the Public Participation Process, the following issues were raised:

Ward	Issue
Ward 1:	Paving project :Sakkies Baai - suburb must be finalized
	All road areas in Nissenville needs to be maintained
Ward 2:	The upgrading of all roads in Bergsig and Bloekomlaan needs to be addressed
Ward 3:	The upgrading of all internal gravel roads need to be addressed.
	Low water bridges needs to be upgraded in future
Ward 4:	

	Roads in Ladismith Town need to be maintained
	Pedestrian paths needs to be upgraded and maintained:
	Towersig street and entire town needs to be re-looked where to be maintained
	Upgrading the road leading to waterkloof and the road to the traffic station in Ladismith

TABLE 24: ROADS AND STROM WATER INFRASTRUCTURE – PUBLIC PARTICIPATION PROCESS

The main road system in Kannaland Municipality consists of National and Provincial roads. The R62 national road passes through Calitzdorp, Zoar and Ladismith and Van Wyksdorp on the corridor linking the Breede Valley with Oudtshoorn and beyond and is maintained by the Provincial Government.

Divisional and Sub Divisional Roads: The divisional roads such as the R327, and R323, are maintained by the Eden District Municipality which has offices in Ladismith and working camps in Calitzdorp and Van Wyksdorp. Roads are critical to the economy of the region because residents, farmers and entrepreneurs are reliant on accessible roads for their livelihood. Van Wyksdorp, which is a small town, remains a very isolated area and is linked to the R62 by the R365 which is a gravel road and also maintained by the Eden District Municipality.

Municipal Roads and Storm water: The Municipality is responsible for the maintenance of roads within the four (4) towns (Ladismith, Calitzdorp, Zoar and Van Wyksdorp).

O - 1.1.C.1 Taxi Route Upgrade Project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework			Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location
Ladismith: Queen Street Upgrade Taxi Route			3,000,00 3.00	4

TABLE 25: TAXI ROUTE UPGRADE PROJECT

Queen Street requires to be upgraded, the tar must be removed and replaced with paving bricks to accommodate traffic needs, safety and the upgrade of the street infrastructure.

O - 1.1.C.2 Roads Stormwater Master plan Project

The Kannaland Council made the decision that all gravel roads be paved. Paving projects is more labour intensive, create jobs, cost effective and less maintenance is required and has a longer life span. It is envisaged that a detailed roads storm water master plan will be finalised during the 2017/18 financial year where all non-functional and functional issues of the roads will be addressed. It is evident that the majority of the paved roads in the four towns are falling into the category of poor to very poor. The overwhelming majority of unpaved roads in the four towns require blading (not necessarily re-gravelling) mainly due to poor drainage as well as poor maintenance over the years. Investment is therefore required to ensure that identified and prioritised projects could be implemented.

O - 1.1.C.3 Ladismith Roads Project

A plan for the extensive upgrade and maintenance of the North-western side of Ladismith's roads will be developed during the 2017/18 financial year. The municipality will engage with Department of Public Works and Transport to assist as the MIG funding only aims to eradicate municipal infrastructure backlogs in poor communities to ensure the provision of quality basic services.

The road network in Ladismith comprises of 22.07 km of paved roads (93%) and only 1.61 km of unpaved roads (7%). The paved and unpaved road network is illustrated in Figure 2 below.



O - 1.1.C.4 Zoar Roads Project

Through the IDP public participation it was identified that there is a need to the internal roads of Zoar and is registered with MIG. Council resolved that all gravel internal roads in Zoar be upgraded with paving. The project will be registered through MIG for funding in 2017/18 – 2027/28. All gravel roads of approximately 20 kilometres will be paved over a ten year period as per the project registration.

The value of the gravel road upgrade will be approximately R84.3 million. During the first phase the following roads will be paved to the value of R5.9 million:

- Konstabel Drive;
- Ruiters Drive;
- Pietersen Crescent;
- Van Ster Avenue;
- Alwyn Avenue;
- Barry Drive (Partially);
- Bruintjies hoogte



FIGURE 28: ZOAR INTERNAL ROAD UPGRADE

O - 1.1.C.5 Calitzdorp Roads Project

The municipality is planning to upgrade all roads and pavements in Calitzdorp and will be of applying for grant funding to address identified upgrades during the 2017/18 financial year.

O - 1.1.C.6 Calitzdorp Road Maintenance Project

General road maintenance will be undertaken on an on-going basis. Operational maintenance will be continued and potholes will be filled.



FIGURE 29: CALITZDORP BERGSIG INTERNAL ROADS

O - 1.1.C.7 Calitzdorp Disaster Roads Paving Project

The following disaster areas have been identified to be paved -:

- Malan Street
- First and Eight Avenue
- Miller Street

An implementation and funding plan will be developed during the 2017/18 financial year.

O - 1.1.C.8 Calitzdorp 3 way stop Project

During the public participation sessions and at the IDP Indaba it was raised that a three way stop is highly needed at the entrance of Calitzdorp (on the Route 62 way). It will minimise road accidents and promote road safety to all motorists and residents. The municipality will ensure that the correct processes are followed to be assisted. The Eden District's technical assistance will be applied for during the 2017/18 financial year to support Kannaland in this matter.

O - 1.1.C.9 Van Wyksdorp Roads Project

General road maintenance will be undertaken on an on-going basis. The municipality aims to upgrade all gravel roads and business plan will be submitted to sector departments during 2017/18-2018/19 in order to source funding.

The road network in Zoar comprises of 0.58 km of paved roads (10%) and only 5.50 km of unpaved roads (90%).



The municipality has developed an integrated transport plan with the assistance of the District Municipality and Provincial Government however support will be required to fulfill those identified projects.

Projects identified in the strategy are as follows:

No	Project		Funding source										PSO 3 Program					PSO 3 Outcomes				
		Ward (to be completed still)	2017/18	2018/19	2019/20	2020/21	2021/22	WCG: Western Cape Government, K: Kannaland Local Municipality	Public transport program	NMT and Sustainable Transport Program	Transport Infrastructure Program	Safely Home Program	Tourism Program	Transport Management Program	Outcome 1: 13% modal shift, private to public transport by 2022, leading to 60:40 private : public split in the CCT CBD	Outcome 2: Shift in freight haulage from road to rail increasing by 10% to 2022	Outcome 3: Reducing road fatalities by 50% in 2022	Outcome 4: Reduce the transport infrastructure backlog by 2022				
1	NMT facilities along main route to Nissenville	1 & 4				X		K/ MIG		X							X					
2	NMT link between Bergsig and R62 towards Calitzdorp	2 & 4				X		WC G/ MIG		X							X					

No	Project	Ward (to be completed still)	Funding source										PSO 3 Program				PSO 3 Outcomes			
			2017/18	2018/19	2019/20	2020/21	2021/22	WCG: Western Cape Government, K: Kannaland Local Municipality	Public transport program	NMT and Sustainable Transport Program	Transport Infrastructure Program	Safely Home Program	Tourism Program	Transport Management Program	Outcome 1: 13% modal shift, private to public transport by 2022, leading to 60:40 private : public split in the CCT CBD	Outcome 2: Shift in freight haulage from road to rail increasing by 10% to 2022	Outcome 3: Reducing road fatalities by 50% in 2022	Outcome 4: Reduce the transport infrastructure backlog by 2022		
3	NMT facilities along key business routes in Ladismith	4			X			K		X							X			
4	NMT facilities along key pedestrian routes in Zoar and Amalienstein	3			X			K		X							X			
5	New walkways in Bergsig	2		X				K		X							X			
6	Development of a local area NMT Plan for Kannaland				X			K		X							X			
7	Walkways along Pretorius and Queens Street in Calitzdorp	2		X				K		X							X			
8	Repair of existing sidewalks in Ladismith	1 & 4		X				K		X							X			
9	Investigation into an Integrated Public Transport Network for Kannaland LM	All		X				WC G	X						X					
10	Shelters and bays in Zoar	3		X				K	X						X					
11	Shelters and bays in Nissenville and town	1 & 4		X				K	X						X					
12	Shelters needed on DR1661 in	2		X				WC G	X						X					

No	Project	Ward (to be completed still)						Funding source	PSO 3 Program					PSO 3 Outcomes				
			2017/18	2018/19	2019/20	2020/21	2021/22		WCG: Western Cape Government, K: Kannaland Local Municipality	Public transport program	NMT and Sustainable Transport Program	Transport Infrastructure Program	Safely Home Program	Tourism Program	Transport Management Program	Outcome 1: 13% modal shift, private to public transport by 2022, leading to 60:40 private : public split in the CCT CBD	Outcome 2: Shift in freight haulage from road to rail increasing by 10% to 2022	Outcome 3: Reducing road fatalities by 50% in 2022
	Calitzdorp																	
13	Demarcation and shelter at Ladismith Informal Rank	4		X				K	X						X			
14	Demarcation of bays in Calitzdorp for minibus-taxis	2		X				K	X						X			
15	Regular maintenance at Ladismith Main Rank	4	X					K	X						X			
16	Upgrading of roads in residential areas	ALL	X	X	X	X		MIG			X							X
17	Sight distance to be improved at intersections in Van Riebeeck Street in Ladismith	1 & 4			X			K			X							X
18	Street lighting various streets	ALL			X			K			X							X
19	Paving of entrance in VWD	4			X			WC G			X							X
20	Maintenance of existing tarred / paved streets	ALL	X	X	X	X		K			X							X
21	Tar road to caravan park					X		K			X							X
22	Storm water Masterplan for All Towns	ALL	X	X	X	X		K										
23	R327 Van Wyksdorp to Ladismith.			X				WC G										

No	Project	Funding source	PSO 3 Program	PSO 3 Outcomes
	Ward (to be completed still)			
	2017/18			
	2018/19			
	2019/20			
	2020/21			
	2021/22			
	WCG: Western Cape Government, K: Kannaland Local Municipality			
	Public transport program			
	NMT and Sustainable Transport Program			
	Transport Infrastructure Program			
	Safely Home Program			
	Tourism Program			
	Transport Management Program			
	Outcome 1: 13% modal shift, private to public transport by 2022, leading to 60:40 private : public split in the CCT CBD			
	Outcome 2: Shift in freight haulage from road to rail increasing by 10% to 2022			
	Outcome 3: Reducing road fatalities by 50% in 2022			
	Outcome 4: Reduce the transport infrastructure backlog by 2022			
33kms				

TABLE 26: INTEGRATED TRANSPORT PLAN

The following prioritized actions are required for implementation of the proposed public transport strategies:

- Assistance to the local authorities in managing operating license applications. The EDM should provide assistance in improving communication between taxi operators and the PRE. This could include regular meetings, travel and secretariat functions;
- Identification of routes with significantly high numbers of illegal operators in order to utilise law enforcement services effectively;
- Update of the PRE EDM public transport registration database to ensure that dormant licenses are not considered and those pending applications (not approved yet) are also included;
- The implementation of an IPTN for the EDM.
- Maintain close relations with the PGWC to ensure intimate knowledge of NLTA-related processes and impact on public transport operations.

As previously mentioned that the tree planting be linked to paving and or upgrading of roads and pathways will be prioritized thus support from sectors or donation from the Department of Agriculture, Forestry and Fishery (DAFF) will be needed to execute this initiative. The implementation of the integrated transport plan will also ensure economic growth for the Kannaland area.

O - 1.1.C.10 Storm Water Project

The municipality is committed to maintain and clean the existent storm water drainage systems in the Kannaland area. It should be noted that with all road upgrades and repairs, storm water drainage systems will also be upgraded and maintained on a regular basis. Many of the storm water structures are functionally poor and require urgent attention. Equipment for the cleansing of the storm water drainage system will be needed, application for funding will be submitted during 2017/18 in order to source the funds.

O - 1.1.D - Water and Sanitation Infrastructure

During the Public Participation Process, the following issues were raised:

Ward	Issue
Ward 1:	Water shortage in summer months needs to be addressed
Ward 2:	Complaints of water leakages must be attended to
	Stronger underground water pipes must be used
Ward 3:	Toilets must be built to address backlog in Berg Street
	Needs clean and sufficient water supply

TABLE 27: WATER AND SANITATION INFRASTRUCTURE – PUBLIC PARTICIPATION PROCESS

Sanitation

The majority of households are connected to waterborne sanitation systems in the Kannaland area. A few households throughout the municipal area are connected to septic or conservancy tanks and approximately ten households in Zoar still use the bucket system.

O - 1.1.D.1 Zoar WWTW Project

Over a three year financial period, the municipality plans to upgrade the WWTW in Zoar. The following measures were identified to be implemented. Business plans will be submitted during the 2017/18 financial year for funding:

- Security and office space at plants
- Fencing repairs
- Cleansing of oxidation ponds
- Refurbishments of pumps

- Relocating of pump stations

O - 1.1.D.2 Ladismith and Calitzdorp Waste Water Treatment Works Project

For the Waste water treatment works in Ladismith and Calitzdorp, the following reports has been completed and submitted to Department of Water and Sanitation for funding:

- Ladismith: Upgrade and extend Waste Water Treatment Works
- Calitzdorp: Upgrade and extend Waste Water Treatment Works

Below is a map of the Ladismith waste water treatment works is currently situated:



FIGURE 30: LADISMITH WWTW



FIGURE 31: CALITZDORP WWTW

The figure below indicates the Waste water treatment plants in Kannaland area.

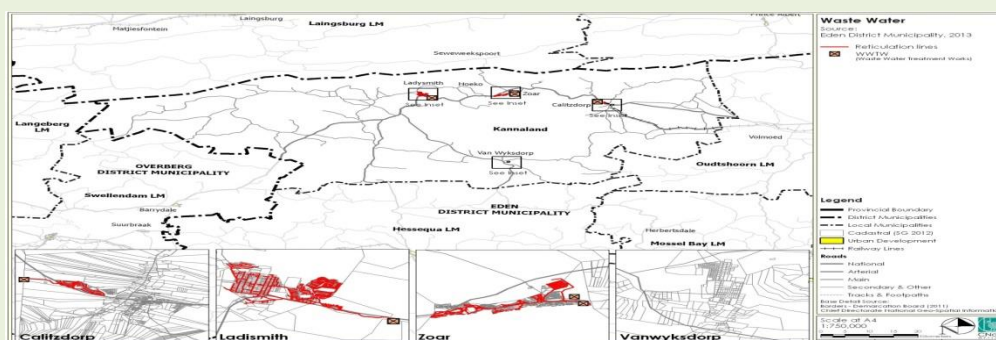


FIGURE 32: WASTE WATER TREATMENT PLANT – AS INDICATED IN SDF FIGURE 3.4.9.1

Water

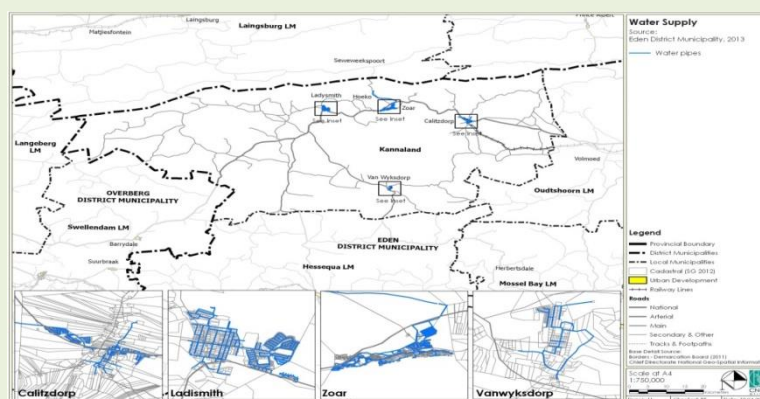
All households have access to basic water services which means that water is available within 200 meters from their dwellings/houses. All the houses in the urban areas of Kannaland Municipality are

provided with individual water connections. Stand pipes are provided in the informal areas as a temporary emergency service. Tanker water services are provided for rural schools and rural communities on request. Water is the sustaining source of life and hence access to safe and potable water is a priority service delivery.

Ladismith water infrastructure: In Ladismith, 12 boreholes are currently operational that were drilled as part of the Ladismith Water Feasibility Study and drought relieve intervention. The 12 boreholes are capable of delivering approximately 43l/s to Ladismith. This equals to a yield of approximately 1.3mm² per annum. The borehole yields are sufficient to enable the municipality to supply water to the town during dry periods. For future planning the drilling of boreholes will continue as it is a main source of water security.

In order to achieve economic growth the Municipality needs to ensure availability of sufficient water infrastructure capacity to meet the existing and future needs of Ladismith. The Municipality must provide sufficient infrastructure (raw water storage capacity) that is sustainable and reliable meeting existing and future social economic growth for Ladismith.

The figure below indicates the water infrastructure in Kannaland.



O - 1.1.D.3 Zoar: Upgrade Water Reticulation Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20
			Ward Location

Program/Project Description	2016-2017 Expenditure Framework	Medium Term Revenue &	Project Information
Zoar: Upgrade Water reticulation	2,500,000.00	2,917,758.00	3

TABLE 28: ZOAR RETICULATION PROJECT

This project is aimed at upgrading water infrastructure which is cost effective and sustainable to the Zoar community with potable water. It aims to supply pipelines that are accessible for maintenance and repairs.

O - 1.1.D.4 Van Wyksdorp Water Reticulation Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20
Van Wyksdorp Rehabilitate and upgrade Water Reticulation		1,000,000.00	4

TABLE 29: VAN WYKSDORP RETICULATION PROJECT

This project is aimed at upgrading water infrastructure which is cost effective and sustainable to the Vanwyksdorp community with potable water. It aims to supply pipelines that are accessible for maintenance and repairs.

O - 1.1.D.5 Calitzdorp: Water Availability study Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20
Calitzdorp: Water Availability studies		750,790.00	2

TABLE 30: WATER AVAILABILITY PROJECT

The project is aimed at the identification of water and to make proposals for providing water security in the Municipality.

O - 1.1.D.6 Ladismith Reticulation Project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework			Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location
Ladismith: Rehabilitate and upgrade Water Reticulation	2,500,000.00	2,500,000.00		4

TABLE 31: LADISMITH RETICULATION PROJECT

This project is aimed at upgrading water infrastructure which is cost effective and sustainable to the Ladismith community with potable water. It aims to supply pipelines that are accessible for maintenance and repairs.

O - 1.1.D.7 Swartberg Water Storage Dam Project

Economic Development in the Ladismith area (which is the biggest economic node in the Kannaland Municipal area) has been hampered by the lack of water storage capacity and bulk waste treatment capacity. The municipality will initiate the process for the establishment of a bulk water storage facility (dam) for the municipal area in partnership with the other two spheres of government.

The availability of raw water storage can unlock current and future housing developments and will ensure the availability of housing to medium to low income groups. Kannaland Municipality has drafted a Human Settlement Plan which will manage the overall housing projects in the municipal areas. The provision of human settlements is a high priority for the municipality. Engagements with the relevant sector departments will be conducted as this is an urgent matter for Kannaland.

The construction of a new raw water storage dam for the town of Ladismith will be a major catalyst



for future sustainable economic growth. As stated previously the dam will unlock various economical projects. This project will be actively pursued during the 2017/18 in order to identify and Source the resources required to build the

dam in partnership with the Eden District, Provincial and National Government. Below is a layout of where the Swartberg Dam will be located:

FIGURE 33: LOCATION OF THE PROPOSED SWARTBERG DAM IN RELATION TO OTHER WATER STORAGE FACILITIES

O - 1.1.D.8 Water leakage project

Water leakage is the main challenge in terms of water storage capacity therefore projects have been registered and funded. The project design and implementation will be initiated during 2017/18 financial year.

O - 1.1.D.9 Water security Project

New proposed developments to make Ladismith water-secure for the next ten years without the proposed Swartberg Dam:

- a) A new 3 mega-litre reservoir;

Additional boreholes drilling and equipping. It must be noted that operating boreholes is expensive because of the associated electricity cost;

- b) Refurbishment of old piped networks.

Van Wyksdorp: Potable water is extracted for Van Wyksdorp from three (3) boreholes and a fountain (Die Oog), stored in a reservoir and distributed to three (3) reservoirs. All water enters the network system via the reservoirs and is distributed to consumers.

Future developments planned for Van Wyksdorp with regards to water is the following:

- Van Wyksdorp Upgrading Of Raw Water Reservoir Project;
- Van Wyksdorp Upgrading of water reticulation networks;
- Van Wyksdorp Additional boreholes drilling and equipping;
- Van Wyksdorp Upgrading of the new WTW.

Calitzdorp

Bulk raw water to Calitzdorp is supplied via the Calitzdorp Nels Dam and gravity bulk pipeline to the water purification plant and reservoirs. All water is entered into the network system via the reservoirs and is distributed to consumers. Currently the Nels Dam is owned and managed by the Calitzdorp Irrigation Water Board.

O - 1.1.D.10 Calitzdorp Water Project

Business plans was submitted to DWS for funding for the following projects:

- Replace raw water supply pipeline from the Nelsdam to the WTW;
- Construct a new reservoir at Bloekomlaan;
- Construct a new direct pipeline to Bloekomlaan;
- Construct a high pressure pump station and reservoir in Bergsig.

Funding for the abovementioned business plans was not approved by the department but will be re-submitted during 2017/18 for funding in the outer financial years.

Zoar

Zoar receives its water directly from the Tierkloof dam which is located in the Seweweeks Poort. The dam is used for domestic supply to the Zoar community. The Tierkloof Dam belongs to the Department of Water and Sanitation, but the water supply is managed by the municipality. A bulk raw water pipeline takes the water to the Zoar Water Treatment Works which is situated opposite the township of Zoar, next to the R62 district road.

O - 1.1.D.11 Zoar Water Project

Business plans will be re-submitted during the 2017/18 financial year to DWS and MIG for funding for the following projects to ensure water security for future demand:

- Construct a new 1 ML reservoir at the WTW at Karooland;

- 1.5 ML reservoir in Droevlei;
- Upgrade & Expansion of WTW;
- Upgrade & Expansion of the WTW;
- New Dam to supply future expansion of town and or refurbishment of old and vandalised boreholes.

O - 1.1.D.12 Water Meters Replacement Project:

Water is a precious commodity in this semi-arid region of the country, rainfall in the region is only approximately 270mm per year. The management and control of water is of vital importance to the municipality. The existing water meters in the Kannaland area (Ladismith, Zoar, Van Wyksdorp and Calitzdorp) are old and dysfunctional due to age and normal wear and tear. Meter management is only a portion of the much greater revenue management strategy to address the current financial administrative and technical shortcoming within the municipality.

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework						Project Information
	Budget	Year	Budget	Year	Budget	Year	
	2017/18		2018/19		2019/20		Ward Location
Kannaland Installation of Water Meters					1,224,683.00		1,2,3,4

TABLE 32: WATER METERS REPLACEMENT PROJECT:

O - 1.1.E Solid Waste Infrastructure Programme

Currently the municipality operates two licensed landfill sites in Ladismith and Zoar. The waste from Van Wyksdorp and Calitzdorp is transported to Ladismith and Zoar respectively.

O - 1.1.F.1 Integrated Waste Management Plan Project

The Municipality will identify and source budget resources for the development and implementation of their 3rd Generation Integrated Waste Management Plan. In accordance with the National Environmental Management: Waste Act (59/2008): National Waste Information Regulations all municipalities will be required to submit actual quantities of waste for the different activities they are registered for on IPWIS from 2018. It is therefore imperative that municipalities are therefore required

to allocate funding and make provision for the acquiring of such equipment in their municipal budgets. Training is essential and will be clearly identified in the budget application.

O - 1.1.E.2 Waste Management Project

Below is what the municipality will do or plan in terms of waste management during the next 5 years:

- Erection of signage for the three landfill sites;
- Addressing the issue of storm water diversion, as indicated in the permits, at the landfill sites;
- Looking into the possibilities of recycling/waste diversion;
- Recycling projects/opportunities
- Further cleaning of illegal dumping sites in Kannaland Municipal Area;
- Environmental awareness and clean-up campaigns;
- Awareness campaigns on illegal dumping and waste minimisation;
- Purchasing of new collection equipment and proper maintenance on vehicles;
- Waste removal services to informal settlements as well as farm areas.
- Calitzdorp: Solid Waste Transfer Station Project

O - 1.1.E.3 Solid waste infrastructure project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework						Project Information
	Budget 2017/18	Year	Budget 2018/19	Year	Budget 2019/20	Year	Ward Location
Calitzdorp: Solid Waste Transfer Station					2,000,000.00		2

TABLE 33: TRANSFER STATION PROJECT:

In order for the Municipality to obtain a licence for the transfer station, it has to be upgraded to the required standards.

O - 1.1.E.4 Van Wyksdorp: Solid Waste Transfer Station Project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework						Project Information
	Budget 2017/18	Year	Budget 2018/19	Year	Budget 2019/20	Year	Ward Location
Van Wyksdorp: Solid Waste Transfer Station					1,319,188.00		4

TABLE 34: VAN WYKSDORP TRANSFER STATION PROJECT:

Below is where the current landfill site is located:

**FIGURE 34: LANDFILL SITES MAP**

Pipeline Projects

Projects that have been identified and funding applications being prepared or in the process of application (Attached see also summaries of the Zoar Integrated Forum and Agricultural organisation).

PROJECT
Zoar – Establishment of pedestrian walk ways
Zoar – Upgrade of main road
Zoar – Paving of identified streets
Zoar – Solid Waste site transfer station
Zoar – Upgrade of Identified Internal Roads
Zoar – Construction of a new dam – irrigation water
Calitzdorp – Solid Waste site transfer station
Calitzdorp – Upgrade of Main Water Pipeline
Calitzdorp – Refurbish Sewer Pump Stations and Waste Water Treatment Works
Calitzdorp – Bloekomlaan: Upgrade Road

PROJECT
Calitzdorp – Establish Pedestrian Walk Ways
Ladismith – Upgrade of Van Riebeeck Street
Ladismith – Solid Waste regional landfill site
Ladismith – Refurbishment of Old Infrastructure: Pipelines
Ladismith – New Reservoir
Van Wyksdorp – Installation of Street lights
Van Wyksdorp – Solid Waste Site transfer station

TABLE 35: PLANNED MIG PROJECTS NOT YET REGISTERED**O - 1.1.E.5 Regional Bulk Infrastructure Grant (RBIG) pipeline projects**

For the 2017-2022 financial years business plans for the following projects will be submitted for funding approval:

- New Reservoir Zoar: Droevlei;
- Calitzdorp Raw Water Supply: Replacement of pipeline from Nels dam to Water Treatment works;
- Calitzdorp: Bergsig: High-level reservoir, pump station and inter-connecting pipelines;
- Calitzdorp: Water Reticulation Network: Upgrade various sections;
- Calitzdorp: Bloekomlaan Reservoir Repairs;
- Ladismith: Upgrade Water Treatment Works systems;
- Kannaland: refurbishment of all sewer pump stations;
- Upgrading and refurbishment of the Klein Karoo Rural Water Supply Scheme.
- Ladismith: Upgrade Water Treatment Works systems – R4 650 000.

Registered approved MIG projects that has not been prioritised as yet.

Project
Zoar – Installation of new Sports Field Lighting
Zoar – Rehabilitation of sports field
Zoar – Upgrade sports field phase 2
Calitzdorp – Bergsig Rehabilitation of Sports field
Calitzdorp – New sports field lighting
Ladismith – Queen Street upgrading of taxi route

Van Wyksdorp – Greenhills new streetlights

TABLE 36: MIG PROJECTS NOT YET REGISTERED

5.3.2 Key Performance Area 2: Service Delivery

(National KPA – 1: Basic Service Delivery and Infrastructure Development)

Objective 2.1 - Provide basic services and improve public relations

The delivery of municipal services in electricity, water, sanitation, refuse, roads and storm water is a key function of the Kannaland Municipality. Kannaland Municipality faces significant service delivery challenges, including the roll out of services to rural areas and under serviced households, ensuring adequate maintenance of assets occur, controlling the rising unit costs of service delivery, addressing future bulk supply shortages and ensuring adequate investment in economic infrastructure. These challenges are made more difficult by high expectations from communities, decaying infrastructure, limited organisational capacity and resources.

Water Services

Kannaland Municipality is the designated Water Services Authority in its demarcated municipal area. There are four water treatment works (plants) located at Ladismith, Zoar, Calitzdorp and Van Wyksdorp.

The municipality in the process to take ownership of the Calitzdorp spa and the Klein Karoo Water Scheme, which currently resides under the Eden District Municipality services.

Van Wyksdorp Water Treatment Works is supplied from Buffelsfontein River and three boreholes as well as irrigation water supply from Buffelsfontein River every second week for seven hours.

Zoar Water Treatment Works is supplied from the Tierkloof Dam belonging to the Department of Water and Sanitation. Calitzdorp Water Treatment Works is supplied from Nels Dam belonging to the Irrigation Board.

Water sources are limited in the Kannaland area. It is imperative that proper planning and management of water resources is ensured at all times. We strive to comply with the water services Act 108 of 1997.

Greendrop and Bluedrop Status

Kannaland Municipality essentially retained the approximate 50% Green Drop score for their 3 wastewater systems during the 2013 audit (municipal score of 50.27%) compared to the results achieved in 2011 (municipal score of 49.10%). The score benefited from a significant improvement in the management of the Calitzdorp system (an improvement from 20.90% to 65.83%).

During the 2013-2014 Green Drop PAT Report, the situation in two of the systems however deteriorated, mainly due to the lack of wastewater quality data available to the Department during the assessment. Other concerns of the DWS are the apparent overload of the wastewater works as indicated in the high operational capacity percentages. This progress reporting decision is made due to either lack of flow measuring or in the case of Ladismith, the actual overloading of the works as evident in the high flows to the works. Other information received indicated that the works is being upgraded, and this is applauded. The Municipality also has no supervisory and process controller competencies available at any of their systems.

This is also appreciated although it would be important for staff to get the necessary accredited training to improve their qualification. Maintenance staff is available at all systems, and the Municipality should retain these competencies. The Municipality is encouraged not to allow the situation at their wastewater works to deteriorate.

The DWS provided the W2RAP and GDIP tools to assist the municipalities to progressively improve their wastewater systems in a planned, consistent and organised manner.

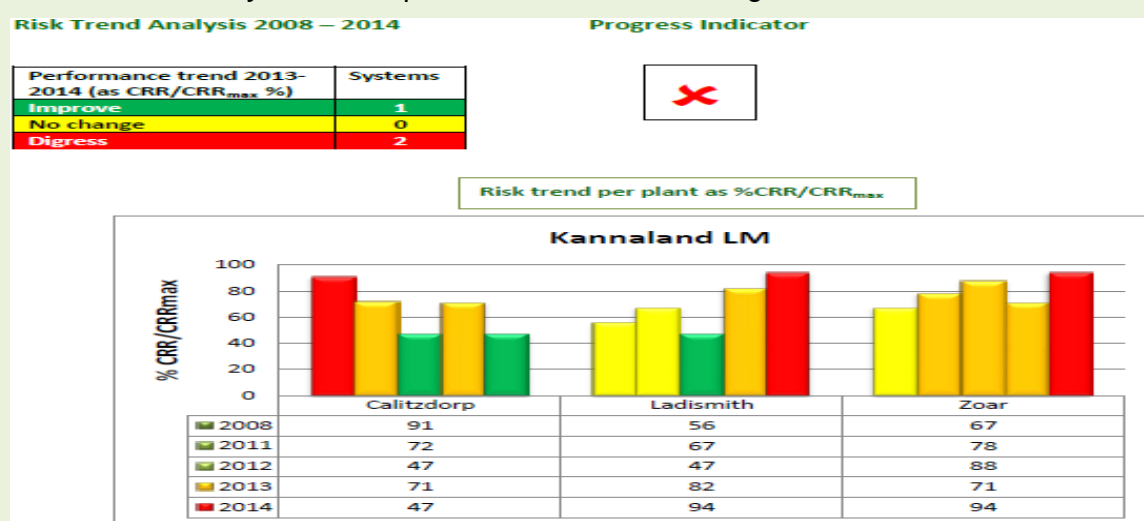


FIGURE 35: GREEN DROP PERFORMANCE – SOURCE: GREEN DROP STATISTICS

Blue Drop Performance of the municipality for 2011/2012 for the Kannaland Municipal Area:

Performance Area	Calitzdorp	Ladismith	Van Wyksdorp	Zoar
Water Safety Planning (35%)	17.50	16.80	11.20	15.75
Treatment Process Management (8%)	3.16	3.16	1.20	1.20
DWQ Compliance (30%)	11.25	3.75	0.00	0.00
Management, Accountability (10%)	1.20	1.20	1.20	1.20
Asset Management (14%)	5.81	5.39	4.34	5.39
Use efficiency loss management (3%)	0.00	0.00	0.00	0.00
Bonus score	3.83	3.00	2.63	2.63
Penalties	1.17	0.91	0.00	0.71
Blue Drop Score (2014)	41.58	32.39	20.57	25.46
2012 Blue Drop Score	29.9%	29.5%	25.4%	21.2%
2011 Blue Drop score	60.3%	70.3%	31.5%	35.8%
System Design Capacity (MI/d)	2.2	3.6	0.5	1.4
Operational Capacity (% i.t.o Design)	56%	89%	100%	100%
Average daily consumption(l/p/d)	280.1	449.4	600.2	300.5%
Microbiological Compliance (%)	99.9%	99.9%	0.0%	66.7%
Chemical Compliance (%)	99.9%	99.9%	0.0%	0.0%
Blue drop risk rating 2012	86%	80.5%	94.3%	86.1%
Blue drop risk rating 2013	83%	80.6%	91.2%	90.7%
Blue drop risk rating	64%	64.2%	80.5%	79.0%

Performance Area	Calitzdorp	Ladismith	Van Wyksdorp	Zoar
2014				

TABLE 37: BLUE DROP STATUS – SOURCE: 2014 BLUE DROP REPORT

The municipality requested that the department provides the municipality in future with detailed and more updated reports.

Public Participation

During the Public Participation Process, the following Service Infrastructure issues were raised:

Ward	Issue
Ward 1:	A dam for Ladismith to adhere to water demand of the community
Ward 2:	Water tanks must be supplied as a risk prevention method in case of fire, when fire fighting services are not available
Ward 3:	Water during summer months must be available
	Sewerage drain in Berg Street and Brintjies hoogte must be drained regularly
	Water provision for agriculture (farmers)
Ward 4:	A dam for Ladismith to adhere to water demand of the community

TABLE 38: WATER AND SANITATION – PUBLIC PARTICIPATION PROCESS

2.1. A - Municipal Services Programme

O - 2.1.A.1 Service Delivery Partnerships Project

During 2017/8 the Municipality will review the service delivery strategies and service levels and will seek opportunities to service delivery partnerships and the development of a delivery plan and charter for implementation.

O - 2.1.A.2 Master Plan Review Project

Draft master plans in respect of all infrastructure related activities and update where current plans are found to be out-dated. Funding to review these plans will be sought and an implementation plan structured during the 2018/19 financial year.

O - 2.1.A.3 Maintenance Plan Project

During the 2017/18 financial year the Municipality will seek funding to appoint a service provider to review existing maintenance and replacement practices aimed at reducing unit costs and to ensure longer term returns on existing infrastructure.

O - 2.1.A.4 Human Settlements Plan Project.

The Municipality has initiated the process with the Department Human Settlements where the development of a HSP was completed. The plan should be reviewed annually as data tend to change.

The Municipality undertakes to conduct the planning for the following housing projects which have been developed as part of a ten year plan for housing for the Kannaland municipal area:

LOCATION	HOUSING UNITS	FUNDING SOURCE
Calitzdorp: Bergsig	692	DoHS MIG
Ladismith: Parmalat	422	DoHS MIG
Van Wyksdorp	TBD	DoHS MIG

TABLE 39: PROPOSED HOUSING PROJECTS - SOURCE: ASLA

O - 2.1.A.5 Proposed Calitzdorp Bergsig Housing Project



FIGURE 36: CALITZDORP BERGSIG HOUSING PROJECT

The first phase of 250 houses has been completed. The second phase will result in a final 692 (inclusive of the 250) houses being completed. A planning and implementation plan will be developed as part of the Integrated Human Settlements Plan.

O - 2.1.A.6 Proposed Ladismith Housing Project: Parmalat

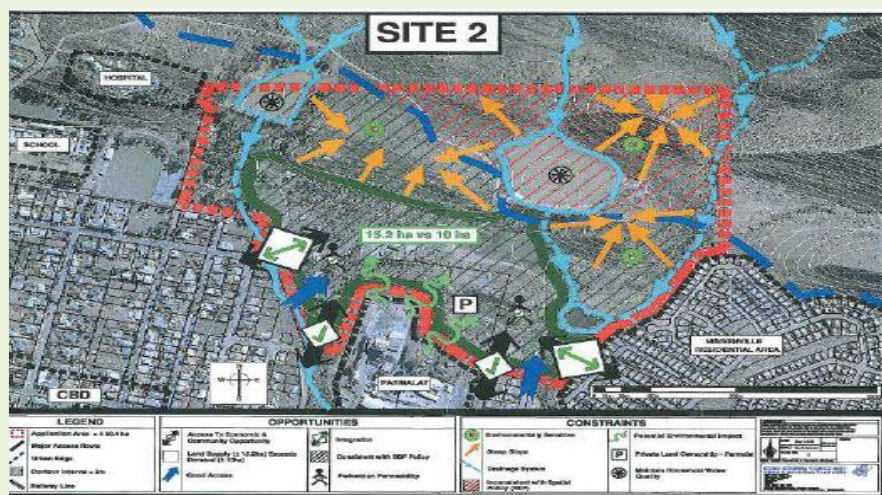


FIGURE 37: LADISMITH HOUSING PROJECT: PARMALAT

The Ladismith, Parmalat project is currently in the planning phase and entails 530 housing opportunities. The bulk services need to be upgraded before implementation of the project can commence.

O - 2.1.A.7 Proposed Ladismith Housing Project: Schoongezicht Project



FIGURE 38: LADISMITH HOUSING PROJECT: SCHOONGEZICHT PROJECT

O - 2.1.A.8 Proposed housing Project: Van Wyksdorp



The Van Wyksdorp project is currently in the planning phase. The housing plan provides for 200 houses for the Van Wyksdorp area. The bulk services for the project stills need to be upgraded and the preferred site acquired from the Provincial Government. A sewage processing plant has been established in Van Wyksdorp.

2.2. A - Underserviced Areas Programme

During the 2017/18 financial year the Municipality will seek funding to appoint a service provider to develop a service delivery strategy for rural areas and for decaying or underserved urban areas and to ensure that sufficient infrastructure and bulk services capacity is available to create an environment conducive for development and economic growth.

O - 2.2.A.2 Reduction of backlogs assessment project

The Municipality will review the data on the access to services by households in the municipality in order to determine the impact of reduction of backlogs. This will be initiated in the 2018/19 financial year in partnership with the Provincial Government.

O - 2.2.A.3 Ladismith: Informal Settlements Services Project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework			Project Information	
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location	
Ladismith: Municipal Services: Informal Settlements	446,040.00	799,302.00		1	

TABLE 40: LADISMITH INFORMAL SETTLEMENTS PROJECT

This project will provide basic services in accordance with the Municipality's Constitutional Mandate and to reduce the backlogs in the provision of basic services to informal settlements.

5.3.3 Key Performance Area 3: Safe Communities:

Objective 3.1: To strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks.

3.1. A – Safety Programme

O - 3.1.A.1 Traffic Services Project

The function of the traffic service is critical to ensure overall law enforcement and road safety within the Kannaland municipal area. The function is also critical for revenue enhancement of the municipality given the various income streams it secures. The following key functions are being managed by the traffic section:

- motor vehicle registration services;
- learners licensing;

- renewals of drivers licence;
- vehicle testing services;
- issuing of traffic fines;
- visible law enforcement (road-blocks); and
- visible law enforcement (illegal water use, illegal dumping, control of hawkers etc.)
- Road markings/signs
- Managing E-natis system

The Traffic Section is manned by permanent traffic enforcement officers who also provide motor vehicle registration services, learners licencing, renewals of drivers licence and vehicle testing services. The officials are based in Ladismith. One of the permanent staff provides a learner licencing and drivers licence renewal function once weekly in Calitzdorp. A vehicle testing management representative has been appointment which will ensure that the municipality is compliant with the SABS 0216 industry standard.

A Traffic Safety and revenue plan will be developed during the 2017/18 financial year, with the assistance of the Provincial Treasury and Department of Local Government. The municipality has identified the needs below. Business plans for funding and assistance will be submitted to Provincial sector departments in the 2017/18 financial year for the projects that have not been funded as yet.

- K53 testing station in Ladismith;
- Procurement of extra cameras;
- Assistance to develop a traffic by law – IGRS
- Speed hump for identified areas throughout Kannaland
- Traffic / Road signs
- Speeding Strips

The municipality will develop a traffic by-law during the 2017/18 financial year for which funding must still be sourced.

O - 3.1.A.2 Disaster Management Strategy/Plan Project

The Municipality will review the status of preparedness and contingency plans associated with the prevailing risks identified in the area and to also reflect possible risk reduction projects during the first three years of the 2017-2022 Financial Years.

The Municipal Manager has mandated the Executive Manager: Corporate Services to do the functionary work with regard to Disaster management in Kannaland. A Disaster Management plan has been developed and approved in terms of the section 53 Disaster Management Act.

The Kannaland Disaster plan has been developed in terms of the Disaster Management Act (Act 7 of 2002) that requires Local Authorities (B Municipalities) to develop and maintain a Disaster Management Plan for their area of control/jurisdiction.

Department of Local Government is in partnership with municipalities will annually review the disaster plan. Public participation workshops have been held to gain input from relevant stakeholders and hazard experts.

The primary goal is to ensure developmental risk reduction, by having planned development linked with risk reduction initiatives and risk information, i.e. taking into account the prevailing risks (risk assessment) for sustainable development (resilient municipal assets and communities). The Risk Assessment Report will be reviewed and approved by Council during 2017/18.

It is also to ensure that operational risk reduction objectives are developed and/or updated. Project plans and contingency plans for identified risks should be in the Disaster Management Plan.

Objective 3.2 – Sustainability of the environment

3.2. A - Environmental Programme

O - 3.2.A.1 Alien Invasive Control Management Plan Project

Municipality will identify the cost and source the funding for the development of an Alien Invasive Control Management Plan during the 2017/18 financial year. This will be done in compliance with the provision in NEMA.

O - 3.2.A.2 Climate change Project

The Municipality will review the Climate Change Advisory (September 2016) during 2017/18 to provide information on how climate change can be mainstreamed into budgets and project planning.

5.3.4 Key Performance Area 4: Socio-Economic Development

(National KPA -2 Economic Development)

Objective 4.1: To facilitate economic growth and social and community development

4.1. A - Community Facilities Programme

O - 4.1.A.1 Calitzdorp: Sport Field Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term	Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location
Calitzdorp: Rehabilitate Sport Field	3,405,460.00			2

TABLE 41: CALITZDORP SPORTS FIELD PROJECT

The current sport field cannot be used at present as the surface is damaged and does not have any grass covering. Sport is an important. Participation in sport is regarded as an important developmental aspect for the community, therefore the Municipality decided to upgrade this sport facility.

O - 4.1.A.2 Ladismith Cemetery Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term	Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20	Ward Location
Ladismith: New Cemetery	1,000,000.00	1,000,000.00		4

TABLE 42: LADISMITH CEMETERY PROJECT

The current cemetery is running out of capacity and a new facility needs to be identified, procured, rezoned and made available for burials.

O - 4.1.A.3 Zoar: Sport field Upgrade Project

Program/Project Description	2016-2017 Medium Term Revenue & Expenditure Framework				Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20		Ward Location
Zoar: Upgrade Sport field Ph.2		1,200,000.00	2,958,376.00		3

TABLE 43: ZOAR SPORT FIELD PROJECT

The current sport field cannot be used at present as the surface is damaged and does not have any grass covering. Sport is an important. Participation in sport is regarded as an important developmental aspect for the community, therefore the Municipality decided to upgrade this sport facility.

O - 4.1.A.4 Pollution control strategy project

In order to protect buyers from purchasing land that may be contaminated, the Municipality should keep a database of contaminated land sites to prevent the transfer of contaminated land to unsuspecting parties (Contaminated Land: Part 8 of the National Environmental Management: Waste Act). Funds for cost of travel and accommodation to enable identified officials to attend training for both of these functions will be identified and earmarked in the budget. Budget resources will also be identified for travel by the identified official to potential section 30 incident sites within the Municipality. During the 2017/18 financial year the municipality will identify and allocate the responsibility to an official to carry out this function.

O - 4.1.A.5 Human Settlements Development Project

The Municipality has a housing waiting list with over 3, 000 individuals and this need to be dealt with in the medium to long term. The Human Settlement Plan will be finalised during the 2017/18 financial year, and an inclusion of a housing pipeline be incorporated in the 2018-2019 IDP Review.

4.1. B - Tourism Programme

O - 4.1.B.1 Tourism Development Strategy Project:

Kannaland's local economy is built on the opportunities created by tourists visiting the area. It is essential that the tourism industry be further developed and investment into this industry be promoted to ensure continuous growth. The Municipality should consider making allocations for tourism development, Art and Culture promotion and SMME development as stated in the IDP. The funding to appoint a service provider to develop an LED (Local Economic Development) strategy which will include the tourism strategy during the 2017/18 financial year.

4.1. C - Health Programme

O - 4.1.C.1 Quality of health strategy project:

The Municipality will identify plans aimed at enhancing the quality of health for the Kannaland communities. This will be done during the 2017/18 financial year for inclusion in the 2018/19 IDP Review.

O - 4.1.C.2 Air quality management project:

The budget requirement for the development of an Air Quality Management will be identified and sourced. Funds will cover air quality monitoring (passive or continuous monitoring of air pollutants), staff training and implementing air quality intervention strategies. Further, where AQMPs or Air Quality Management By-laws are not developed, funds must be secured for such development and adoption by the Council. Monitoring of ambient air quality and point, non-point and mobile source emissions will enable the municipalities to report on its compliance with ambient air quality standards.

Awareness raising promotes community well-being and empowerment, and emphasises the adverse impacts of air pollution, climate change and ozone layer protection, human health and the environment; and the benefits of clean air. The Municipality will identify the cost of securing a service provider during 2017/18 to develop the Air Quality Management Plan in order to draft the necessary planning documentation during the 2018/19 financial year.

A budget allocation for Air Quality Management needs to be secured. Budget should ideally cover the following: air quality monitoring (passive or continuous monitoring of air pollutants), staff training and implementing air quality intervention strategies.

4.1. D - Joint planning Programme

The Joint Planning Initiative is based on mega or long term projects and initiatives whilst IDP the Indaba focuses on immediate or short term projects which require integrated planning and support from other lead departments in provincial and national government. The Joint Planning Initiatives (JPI's) are more of a longer term nature.

These JPI's consist of catalytic projects commonly referred to as game changers which would require collaborative planning and pooling of resources between the relevant government departments and municipalities in order to maximise the impact on the socio-economic and infrastructure challenges faced by local communities.

The municipality has identified a number of catalytic projects/programmes namely under the following categories:

- Housing;
- Social services and Youth activities and development;
- Infrastructure: water, drainage and sanitation;
- Infrastructure: roads and transport
- Safety and security;
- Economic development and local business development;
- Agriculture.

These projects/programmes would have a significant impact in the municipality, region and even the province and it is therefore crucial that strategic partnerships be formed to facilitate joint planning for the successful implementation of these projects/programmes. The current status of previous commitments will not be included in this document as mentioned at the IGR platforms, Council is in process to review the long term projects to be tabled at the next JPI. However, the Departments which played a significant role in assisting the municipality are commended for their continuous commitment.

4.1. D.1 Joint planning initiatives project: initiatives:

The Municipality will actively engage with the lead departments at Provincial Government in terms of projects as agreed within a particular JPI, and reflect such engagements within the 2018-2019 IDP

Review. The Municipality will indicate some of the key partnering arrangements in place to support service delivery initiatives in creating public value.

4.1. D.2 Agri Processing Project:

The Klein-Karoo has vast developmental potential, especially in terms of agriculture and agro-processing. The dairy, fruit and livestock economic sectors need to be analysed in order to determine the output and benefit that can be gained from these sectors. Value-adding processing of these sectors should be analysed in terms of developing these sectors from the base of Kannaland. The appointment of a service provider to do this analysis and to development of an Agro-Processing implementation plan is an important mechanism to prepare strategies to optimise the regions development potential. During the 2017/18 financial year the municipality will source funding for the appointment of a service provider.

4.1. D.3 SDF Review Project:

Municipality will identify the cost and source the funding for the review of the SDF during the 2017/18 financial year in order to include the provision for this expenditure in the 2018/19 financial year. The Municipality will include the SDF as a core component of the 2018/19 IDP review.

The SDF will be reviewed and its associated implementation plan aligned with the SPLUMA 2013 principles and incorporate the SDF as a core component of the IDP. The DP Review will include references to and link the IDP and SDF national and provincial sector plans, strategies and investments to enable integrated service delivery and spatial alignment through the use of the IDP as principal strategy.

5.3.5 Key Performance Area 5: Effective and Efficient Governance

(National KPA 3 Institutional Development and Municipal Transformation)

(National KPA 5 Good Governance and community participation)

Objective 5.1: To promote efficient and effective governance with high levels of stakeholder participation

5.1. A - Institutional Stabilisation Programme

The political and administrative leadership of Kannaland Municipality need to be positioned to manage competing demands for limited resources in a fair equitable and efficient manner.

O - 5.1.A.1 Policy Review Project:

The Municipality will draft and update all municipal policies, strategies and operational plans over the next three years. This will be done to ensure that municipal activities, rules and procedures are consistent with all relevant policies, legislations and by-laws.

O - 5.1.A.2 PMU Project

Program/Project Description	2016-2017 Expenditure Framework	Medium Term Revenue &	Project Information
	Budget Year 2017/18	Budget Year 2018/19	Budget Year 2019/20
PMU	518,500.00	535,150.00	552,750.00
			1,2,3,4

TABLE 44: PMU PROJECT

In order for the Municipality to achieve its project implementation and capital budget expenditure targets, a project management unit analysis will be set up. This will entail project design, project administration and project implementation monitoring.

5.1. A.3 Office Space and Equipment Project:

The municipality is facing the challenge of limited office space, staff members working in rented containers and inability to provide sufficient and effective office and technical equipment. During the 2017/18 financial year an assessment will be done to determine the resources and funding required to be able for staff to function efficiently and effectively in a safe, clean environment.

Objective 5.2 Transparency and Participation

5.2. A - Participation Programme

5.2. A.1 Communication Project:

Improve communication of the vision, strategy and plans both internally and externally, to keep staff informed, capacitated and to manage the expectations of the community.

5.2. A.1 Community participation in Agriculture Project

In the Agricultural sector, improved processes will be introduced to support inclusive participation in agricultural value-chains and fostering an environment conducive to local and regional private sector investment. Community participation in the structures of local government will be strengthened in all the areas in the Municipality. Kannaland Municipality will work towards ward committees that are better resourced, more powerful and taken seriously. The Municipality will actively promote the participation of the community in the working of the municipality.

5.3.6 Key Performance Area 6: Efficient Workforce

Objective 6.1: To provide an efficient workforce by aligning our institutional arrangements to our overall strategy

Human Resources

The municipality consists of 243 employees, of which 3 are Section 57 employees, 120 permanent, 122 contract employees and 1 intern. The staff component is the biggest single budget item and hence the development, motivation and utilization of staff are a high priority.

6.1. A - Institutional Transformation Programme

The key deliverable of this programme is to bring stability in the council administration, to fill management vacancies, conduct organizational redesign and to compile all job descriptions and job evaluations for all posts.

O - 6.1. A.1 Organisational Structure Project

Funding will be sourced in order to appoint a service provider to conduct an organisational review over the first two financial years in order to ensure that the organogram is aligned to the Integrated

Development Plan (IDP) and Service Delivery and Budget Implementation Plan (SDBIP) which is efficient, affordable and sustainable. The first step will be to source financial resources to be able to appoint a service provider to conduct this process.

O - 6.1. A.2 Staffing Project

Once a sustainable organizational structure has been developed and all posts have been evaluated, the Municipality will embark on the review and placement of staff. Critical and funded vacancies will be filled.

The staffing of the structure will be done in order to ensure that suitably qualified and experienced staff will be appointed. This is to ensure that the right person with the right skills is placed in the right position.

O - 6.1. A.3 Policies and Procedures Project

It is paramount that all organizational policies, processes and procedures are reviewed in order to ensure that it is valid, relevant, legally compliant and viable. The Municipality will source funding in the 2017/18 financial year to enable it to conduct and deliver on the deliverables of this project.

Objective 6.2 - To enable education and skills development to equip people with economic skills

6.2. A - Employee Improvement Programme:

The municipality received funding from the Department of Local Government to develop a Human Resource Strategy that will influence the operations of current policies and possibly the compilation of new policies. The new strategy will also assist the municipality amongst other with the most effective placement of employees.

O - 6.2.A.1 Staff Development Project

The following interventions have been identified to maximize employee development:

- Create development opportunities for the municipality's employees and maximizing existing developmental opportunities;

- Implementation of the Individual Performance Management programme for all managers/supervisors up to the third level of reporting;
- Implementation of the employment equity plan;
- Maximising the SAMRAS leave module, in particular employee self-service that related to leave entitlements and leave requests.
- Development of supervisors to improve the skills needed to supervise and lead employees; A number of critical areas that management needs to address to ensure optimal service delivery have been identified and these areas must be strongly attend to in future:
 - Low staff morale
 - Inadequate skills levels
 - Inadequate qualifications
 - Lack of clarity regarding roles and responsibilities (middle management and supervisors)
 - Lack of discipline

O - 6.2.A.2 Workplace Skills Development Project (WSP)

The municipality has developed a Work Place Skills Plan (WSP) of which the main objective is to ensure that there is staff development through training interventions for all levels of staff. The municipality is committed to ensure that all staff is skilled and trained in their respective fields, even though there are financial constraints. The municipality will continue to source funding and form cooperative partnerships where the opportunity presents itself to ensure a well-qualified workforce. As part of the workplace skills development project, the skills requirements of staff will be identified, personal development plans developed and training programmes developed in order to ensure that staff is appropriately skilled and equipped to conduct their duties with excellence. This process will be rolled out over the first three years of the next term of office.

5.3.7 Key Performance Area 7: Financial Sustainability

(National KPA 4 Financial viability and management)

Objective 7.1: To strive towards a financially sustainable municipality

O - 7.1. A - Financial Recovery Programme

Kannaland Municipality has a duty to improve financial management across expenditure, revenue, assets, supply chain, debt and financial reporting streams to determine the most effective way of solving its financial problems.

The principal strategic objective of the Financial Recovery Plan is to identify key priority areas and to set out specific intervention projects which will address the financial problems identified.

In order ensure stability and remedy the poor financial practices within the municipality the following strategic projects will be addressed in the short, medium and long term. Short term projects will be for a period from July 2017 to June 2018, medium term from July 2017 to June 2022 and long term for a period extending beyond 2022.

This programme entails the review of the current budgeting strategy and process as well as expenditure and management systems to ensure efficient and effective service delivery in line with Kannaland Municipality priorities. It will require the review of revenue management systems in order to maximise revenue generation possibilities and improve revenue performance. The cash and debt management strategies and practices will have to be reviewed and internal controls and delegations regarding financial management should be re-assessed. Asset management through an integrated infrastructure and asset management plan must also be implemented. The review of governance practices in the Supply Chain Management practices should be done and proper controls and risk management practices should be implemented.

The organisational redesign for the BTO office should be reviewed and job descriptions and have job evaluations done in order to appropriate the capacitation of BTO with skilled personnel. The review of IT infrastructure and implementation of Accounting, Budget and Reporting Reforms should be scheduled. All short term and long term liabilities should be reviewed and contingent liabilities schedule for the repayment of debt.

O - 7.1. A.1 Budgeting and Expenditure Management Project

The Municipality will review the budget and expenditure management systems to ensure that efficient and effective service delivery is in line with Municipal priorities. This will require the development of a Long Term Financial Plan (10 - 15 years) split into three phases being 1 – 5 years, 6 – 10 years and 11 – 15 years. The plan will include the following:

- Predicting future municipal revenue;

- Estimating future operational expenditure;
- Determining future capital demand:
- Asset replacement expenditure;
- New capital investment;
- Determining a funding model for future capital investment;
- Perform financial modelling inclusive of:
- Liquidity and ratio management;
- Recommendations to attain financial results;

The municipality will implement the creditors' payment policy and perform creditor classification and institutionalize pre-determined creditors payment dates and implement expenditure and creditors management.

O - 7.1. A.1 Revenue Management Project

The revenue management systems will be reviewed in order to maximise revenue generation possibilities and improve revenue performance. The Municipality will source funding for the appointment of a service provider to draft a revenue enhancement strategy and plan to improve revenue value chain by:

- Performing a complete meter audit of metered services;
- Performing a physical verification of all services and service connection points.
- Performing debtor data analysis and cleansing.
- Performing a complete indigent verification process.
- Conducting on-site water demand management and loss control.
- Analysing electricity losses and draft a loss control program.
- Engage in meter replacement program.
- Apply cost-reflective tariff modelling.
- Reviewing, analysing and performing benchmarking of user tariffs to the industry norm.

The focus of this project will be on the Revenue Management Value Chain.

Revenue Planning	Forecast on expected revenue to be based on realistic rates and services based on past performance trends and economic realities.
Customer Database Management	Ensure accurate and reliable billing and customer/consumer data. Administrative and political engagements with customers.
Tariff Setting	It is a pivotal and strategic part of the compilation of any budget. Public participation, taking into account economic realities
Billing	Billing system must correctly reflect all billing data and customer data Accurate invoice must be issued on time to the relevant customer
Revenue Collection	Collection of all revenue owed to the municipality by customers/consumers
Metering & Loss Management	Water and electricity meter numbers must be recorded correctly and linked to the corresponding property on the billing system Water and electricity meters must be read with regularity and accuracy
Indigent Management System	System used to manage Indigent Register Periodic review of indigent register Data cleansing
Credit Control	Minimising risk from bad debts by restricting consumers who cannot afford

The credit control and debt collection policy will be enforced through:

- Appropriate revenue collection systems that are aligned to the Municipal Systems Act and the revenue management and debt collection policies of the municipality;
- Accurate calculations and timeous reporting of revenue due and outstanding debtors on a monthly basis, thereby enabling appropriate monitoring and oversight of debt collection practices and timely action with regards to debt impairment; and
- Allocating sufficient staff/capacity to proactively drive the revenue management and debt collection functions and policies, in order to intensify revenue collections.

O - 7.1. A.3 Customer Care Project:

The Municipality will introduce measures to enhance levels of customer care, increase responsiveness to consumer billing and other queries. Over the next three financial years the Municipality will improve community access points, source funding to conduct a customer satisfaction survey, implement a customer service call centre, set benchmarks for activities relating to complaints and set service level standards for customer responses.

O - 7.1.A.4 Cash and Liability Management Project

The Municipality will review cash and debt management strategies and practices. All liabilities (current and non-current) will be reviewed and a strategy developed in order to meet obligations in a timely manner in accordance with legislative requirements. In order to achieve the deliverables of this project, the Chief Financial Officer will implement cash flow monitoring, design and implement an effective grant management and monitoring system to ensure that conditional grants are only used for their intended purposes and introduce the daily management of cash-flow with weekly reporting. Monthly bank reconciliations will be performed and long-term debt reviewed and restructured where economic benefits can be attained.

Cash flow targets will be set as part of the MTREF and short term liabilities reviewed and calculated. Long term liabilities will be reviewed and calculated and all contingent liabilities disclosed. Creditors will be engaged to discuss/agree repayment plans/arrangements for liabilities in order to enter into arrangements with creditors and to monitor that the payments are made according to the agreed repayment plans.

O - 7.1.A.5 Financial Controls Project

The Municipality will review internal controls and delegations regarding financial management. Some of the initiatives that will be conducted include the following:

- Draft an Audit action plan to address audit findings.
- Correct prior year errors and compile audit evidence file.
- Review monthly progress on corrected errors.
- Implement safeguards to mitigate errors going forward.
- Perform Risk analysis of municipality and implement risk management system.

- Revise and implement internal systems of control to mitigate financial risks identified.
- Review all policies, budget and non-budget related, and amend where necessary.
- Workshop all policies with related staff.
- Review and amend all job descriptions.
- Review archiving and record keeping.
- Staffing of Budget and Treasury Office organogram with suitably qualified and experienced staff.
- Capacitating and skills development of finance department staff.
- Implement internal controls to mitigate financial risks

O - 7.1. A.6 Asset Management Project:

The Municipality will source funding during the 2018/19 financial year in order to develop and integrated infrastructure and asset management plan. This will entail the review and updating of the Asset Register. This plan should include the assessment of the useful lives of all infrastructure assets by performing a conditional assessment and ensure that a GIS reference exists for all infrastructure assets.

An Asset Procedure Manual will be drafted and asset maintenance plans will be included for all major asset categories. The Municipality will perform a municipal strategic asset assessment and master plans review for all Infrastructure assets will be updated and funds sourced in order to perform a land audit to identify all municipal assets and to determine a performance assessment of all municipal properties. This will be followed by the drafting of a municipal asset management strategy which also includes a performance and disposal framework.

O - 7.1.A.7 Supply Chain Management Project

The Municipality will review governance practices in the Supply Chain practices and implement proper controls and risk management practices. In this process SCM Delegations will be reviewed and electronic Contract Management system implemented. The Supply Chain Management Policy and Supply Management Chain Structure will be reviewed and work-shopped with all staff. The Municipality will develop and centralise an online Procurement and Record Management System with a document checklist for each bid and will organise training for all Bid Committees.

O - 7.1. A.8 Capital Budget Implementation Project:

The Municipality needs to be pro-active with regards to planning and implementation of the capital budget. Potential risks need to be addressed as soon as they are identified. This will require the improvement of planning processes in order to institute the monitoring of action plans to ensure that capital budget is implemented effectively to avoid under spending as experienced in the previous years and the current financial year. Attention will be given to projects business plans, risk identification and turnaround times on supply chain management processes to ensure the full implementation of the capital budget for a financial year.

O - 7.1. A.9 Debt impairment project:

The Municipality will review the debtors during the 2017/18 financial year in order to make appropriate provision for debt impairment that might result in write-offs during the next 2-3 financial years.

O - 7.1.A.9 Repairs and Maintenance Project:

Given the financial situation of the municipality the funding of repairs and maintenance has proven to be a major challenge. The Municipality will, as part of the review and assessment of the assets of the municipality prepare a comprehensive repair and maintenance plan to ensure that assets are properly maintained to avoid interruptions in service delivery.

O - 7.1.A.10 Financial controls Project:

The Municipality will embark on a process to review internal controls and delegations regarding financial management during the 2017/18 financial year.

O - 7.1.A.11 ICT Project:

The Municipality will initiate a process towards the review of IT infrastructure and implement accounting in order to ensure that financial systems are in line with the Municipal Budget and Reporting Reforms (mSCOA etc.).

O - 7.1.A.12 Liability Management Project

All liabilities current and non-current will be reviewed and a strategy developed to meet obligations in a timely manner in accordance with legislative requirements.

- Review and calculate short term liabilities
- Review and calculate long term liabilities
- Review and disclose all contingent liabilities
- Engage with creditors to discuss/agree repayment plans/arrangements
- Draft repayment plans for liabilities and enter into arrangements with creditors

5.4 Proposed Organisational Performance

5.4.1 5 Year Performance Scorecard

KPA	Strategic Objective	Performance Indicator	Performance Measure	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5
KPA1: Reliable Infrastructure	Objective 1.1 – To provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens	1A. Capital budget spent	1A. % of capital budget spent	85%	90%	90%	92%	95%
		1B Spend on repairs and maintenance	1B Percentage of repairs and maintenance spend	85%	88%	90%	92%	95%
KPA 2: Service Delivery:	Objective 2.1 To provide basic services and improve our public relations)	2A (a) Households with access to basic level of water (NKPI – 10a)	2A (a) Number of residential properties which are billed for water or have pre-paid meters	4,748	4,800	4,900	4,950	5,000
		2A (b) Households with access to basic	2A (b) Number of	5,571	5,600	5,650	5,700	5,750

KPA	Strategic Objective	Performance Indicator	Performance Measure	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5
		level of electricity (NKPI – 10a)	residential properties which are billed for electricity or have pre-paid meters					
		2A (c) Households with access to basic level of sanitation (NKPI – 10a)	2A (c) Number of residential properties which are billed for sewerage	4,415	4,450	4,500	4,550	4,600
		2A (d) Households with access to basic level of refuse removal (NKPI – 10a)	2A (d) Number of residential properties which are billed for refuse removal	4,109	4,150	4,200	4,250	4,300
	Objective 2.2 - Provide for the needs of indigent households through improved services.	2B (a) Indigent households receiving free basic water	2B (a) Number of indigent households receiving free basic water	1,880	1,900	1,930	1,950	1,980
		2B (b) Indigent households receiving free basic electricity	2B (b) Number of indigent households receiving free basic electricity	1,880	1,900	1,930	1,950	1,980
		2B (c)	2B (c)					

KPA	Strategic Objective	Performance Indicator	Performance Measure	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5
		Indigent households receiving free basic sanitation	Number of indigent households receiving free basic sanitation	1,880	1,900	1,930	1,950	1,980
		2B (d) Indigent households receiving free basic refuse removal	2B (d) Number of indigent households receiving free basic refuse removal	1,880	1,900	1,930	1,950	1,980
KPA 3: Safe Communities:	Objective 3.1 <i>To strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks)</i>	3A Compliance with drinking water quality standards	3A Percentage compliance with drinking water quality standards	90%	90%	90%	92%	95%
KPA 4: Socio-Economic Development:	Objective 4.1 <i>To facilitate economic growth and social and community development</i>	4A Gravel road converted to paved/tar road	4A Metres of gravel road converted to paved/tar road	2,000	1,500	2,200	2,300	2,400
		4B EPWP jobs created (NKPI – 10d)	4B Number of EPWP jobs created	70	80	90	100	100
KPA 5: Effective	Objective 5.1 <i>To promote efficient</i>	5A <i>Unqualified</i>	5A <i>Auditor General</i>	Unqua	Unqua	Unqua	Clean	Clean

KPA	Strategic Objective	Performance Indicator	Performance Measure	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5
and Efficient Governance	<i>and effective governance with high levels of stakeholder participation</i>	<i>audits by the Auditor General</i>	<i>opinion</i>	<i>lified Audit</i>	<i>lified Audit</i>	<i>lified Audit</i>	<i>Audit</i>	<i>Audit</i>
	Objective 5.2 Transparency and participation	5B Council meetings open to the public	5B Number of Council meetings open to the public	4	4	4	4	84
KPA 6: Efficient Workforce	Objective 6.1 To provide an efficient workforce by aligning our institutional arrangements to our overall strategy	6A People from employment equity target groups employed in the three highest levels of management	6A Percentage of people from employment equity target groups employed in the three highest levels of management in compliance with the approved employment equity plan	60%	65%	70%	75%	75%
	Objective 6.2 - To enable education and skills development to equip people with economic skills	6B Budget spend on implementation of WSP	6B Percentage budget spent on implementation of WSP	80%	85%	90%	92%	95%
KPA 7: Financial Sustainability	Objective 7.1 To strive towards a financially	7A Cost coverage	7A Ratio of cost coverage	1.2:1	1.5:1	1.8:1	2:1	2.1:1

KPA	Strategic Objective	Performance Indicator	Performance Measure	Target Year 1	Target Year 2	Target Year 3	Target Year 4	Target Year 5
ity	sustainable municipality)		maintained					
		7B Debtors to Annual Income	7B Performance Indicator: Net Debtors to Annual Income Revenue expressed as a percentage	35%	35%	30%	25%	25%
		7C Debt coverage by own billed revenue	7C Ration of debt coverage by own billed revenue	1.5:1	2:1	2.2:1	2.3:1	2.5:1
		7D Bank Account Reconciliation	7d Reconciliation of bank account within 30 days after month end	12	12	12	12	12

TABLE 45: PERFORMANCE SCORECARD

5.4.2 Performance Scorecard Definitions

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
KPA 1: Reliable Infrastructure	Objective 1.1 –To provide access to reliable infrastructure that will	1A. Capital budget spent (NKPI – 10c)	1A. % of capital budget spent	Percentage reflecting year-to-date spend of the municipal capital budget Formula: Actual capital budget spend/capital budget x 100/1
		1B Spend on repairs and maintenance	1B Percentage of operating budget spent on repairs and	Definition = Percentage reflecting year-to-date spend (including secondary cost)/total repairs and maintenance budget. Note that the in-year reporting during the financial year will be indicated as a trend (year-

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
	contribute to a higher quality of life for Kannaland citizens		maintenance	to-date spend). Maintenance is defined as the actions required for an asset to achieve its expected useful life. Planned maintenance includes asset inspection and measures to prevent known failure modes, and can be time - or condition-based. Repairs are actions undertaken to restore an asset to its previous condition after failure or damage. Expenses on maintenance and repairs are considered operational expenditure. Primary repairs and maintenance costs refer to repairs and maintenance expenditure incurred for labour and materials paid to outside suppliers. Secondary repairs and maintenance costs refer to repairs and maintenance expenditure incurred for labour provided in-house/internally.
KPA 2: Service Delivery:	Objective 2.2 - Provide for the needs of indigent households through improved services.	2B (a) Indigent households receiving free basic water (NKPI – 10a)	2B (a) Number of indigent households receiving free basic water	Number of residential properties which are billed for water or have pre-paid meters as at 30 June of each financial year. Calculated as the actual number of monthly bills that have been issued
		2B (b) Indigent households receiving free basic electricity (NKPI – 10a)	2B (b) Number of indigent households receiving free basic electricity	Number of residential properties which are billed for electricity or have pre-paid meters (Excluding Eskom areas) as at 30 June of each financial year. Calculated as the actual number of monthly bills that have been issued
		2B (c) Indigent households	2B (c) Number of indigent	Number of residential properties which are billed for sewerage as at 30 June of each financial year. Calculated as the actual number

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
		receiving free basic sanitation (NKPI – 10a)	households receiving free basic sanitation	of monthly bills that have been issued
		2B (d) Indigent households receiving free basic refuse removal (NKPI – 10a)	2B (d) Number of indigent households receiving free basic refuse removal	Number of residential properties which are billed for refuse removal as 30 June of each financial year. Calculated as the actual number of monthly bills that have been issued
	Objective 2.2 - Provide for the needs of indigent households through improved services.	1D (a) Indigent households receiving free basic water (NKPI – 10b)	1D (a) Number of indigent households receiving free basic water	Provide free basic water to indigent households as defined in paragraph 9(1) of the Municipality's Credit Control and Debt Collection Policy as at 30 June 2017
		1D (b) Indigent households receiving free basic electricity (NKPI – 10b)	1D (b) Number of indigent households receiving free basic electricity	Number of formal residential properties connected to the municipal electrical infrastructure network (credit and prepaid electrical metering)(Excluding Eskom areas) and which are billed for electricity or have pre-paid meters (Excluding Eskom areas) as at 30 June of the financial year
		1D (c) Indigent households receiving free basic sanitation (NKPI – 10b)	1D (c) Number of indigent households receiving free basic sanitation	Number of formal residential properties connected to the municipal waste water sanitation/sewerage network for sewerage service, irrespective of the number of water closets (toilets) which are billed for sewerage as at 30 June of the financial year
		1D (d) Indigent households	1D (d) Number of indigent	Number of formal residential properties for which refuse is removed once per week and which are billed for refuse removal as at 30

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
		receiving free basic refuse removal (NKPI – 10b)	households receiving free basic refuse removal	June of the financial year
KPA 3: Safe Communities:	Objective 3.1 To strive towards a safe community in Kannaland through the proactive management of traffic, environmental health, fire and disaster risks	4D Compliance with drinking water quality standards	4D Percentage compliance with drinking water quality standards	% of water samples in the Kannaland jurisdiction area to comply with SANS241 micro biological indicators. Calculated by calculating: Number of water samples in compliance with SANS241 micro biological indicators/Number of water samples x 100/1
KPA 4: Socio-Economic Development:	Objective 4.1 To facilitate economic growth and social and community development	4A Gravel road converted to paved/tar road	4A Metres of gravel road converted to paved/tar road	This indicator will be measured by calculating the number of metres of gravel road that was paved (with paving bricks or concrete) or tarred (bitumen) during the period in question. Information will be drawn from the project sheets as signed off by the relevant official of the Municipality.
		4B EPWP jobs created (NKPI – 10d)	4B Number of EPWP jobs created	This indicator measures the number of work opportunities created through the Expanded Public Works Programme (EPWP). An EPWP work opportunity is defined as paid work created for an individual on an EPWP project for any period of time, within the employment conditions of the Code of Good Practice for

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
				Special Public Works Programmes.
Key Performance Area 5: Effective and Efficient Governance	(Objective 5.1 <i>To promote efficient and effective governance with high levels of stakeholder participation)</i>	5A <i>Unqualified audits by the Auditor General</i>	5A <i>Auditor General opinion</i>	This indicator measures good governance and accounting practices and will be evaluated and considered by the Auditor-General in determining his opinion. An unqualified audit opinion refers to the position where the auditor, having completed his audit, has no reservation as to the fairness of presentation of financial statements and their conformity with Generally Recognised Accounting Practice. This is referred to as 'clean opinion'. Alternatively, in relation to a qualified audit opinion, the auditor would issue this opinion in whole, or in part, over the financial statements if these are not prepared in accordance with Generally Recognised Accounting Practice, or could not audit one or more areas of the financial statements. The audit opinion covers the audit of predetermined objectives.
		5B <i>Council meetings open to the public</i>	5B <i>Number of Council meetings open to the public</i>	The indicator measures the number of municipal council meetings open to the public to maintain transparency in the day-to-day governance of the Municipality.
Key Performance Area 6: Efficient Workforce	Objective 6.1 <i>To provide an efficient workforce by aligning our institutional arrangements to our overall</i>	6A <i>People from employment equity target groups employed in the three highest levels of</i>	6A <i>Percentage of people from employment equity target groups employed in the three highest</i>	The indicator measures the percentage of people from employment equity target groups employed in the three highest levels of management in compliance with the approved employment equity plan. Each department contributes to the corporate achievement of targets and goals by implementing its own objectives of quantitative and qualitative goal

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
	strategy	management	levels of management in compliance with the approved employment equity plan	setting. Calculated as follows: Number of EE targeted employees (top3 levels)/Number of positions (Minus vacant positions) x (100/1)
		6C Limit vacancy rate to 30% of budgeted post	6C % vacancy rate	Calculated as follows: Number of funded posts vacant divided by number of budgeted funded posts expressed as percentage
	Objective 6.2 - To enable education and skills development to equip people with economic skills	6B Budget spend on implementation of WSP	6B Percentage budget spent on implementation of WSP	A workplace skills plan is a document that outlines the planned education, training and development interventions for the organisation. Its purpose is to formally plan and allocate budget for appropriate training interventions, which will address the needs arising out of local government's skills sector plan, the Municipality's strategic requirements as contained in the IDP and the individual departmental staffing strategies and individual employees' PDPs. The WSP will also take into account the employment equity plan, ensuring incorporation of relevant developmental equity interventions into the plan. Formula: Actual training budget spend/Training budget x 100/1
KPA 7: Financial Sustainability		7A Cost coverage (NKPI – 10g(i))	7A Ratio of cost coverage maintained	Total cash and investments (short-term), less restricted cash for monthly operating expenditure. Financial viability measured in terms of the available cash to cover fixed operating expenditure as at 30 June 2017

Priority	Strategic Objective	Performance Indicator	Performance Measure	Definition
	Objective 7.1 To strive towards a financially sustainable municipality)			((Cash and Cash Equivalents - Unspent Conditional Grants - Overdraft) + Short Term Investment) / Monthly Fixed Operational Expenditure excluding (Depreciation, Amortisation, and Provision for Bad Debts, Impairment and Loss on Disposal of Assets))
		7B Debtors to Annual Income (NKPI – 10g(ii))	7B Performance Indicator: Net Debtors to Annual Income Revenue expressed as a percentage	This is a calculation where we take the net current debtors divided by the total operating revenue. Financial viability measured in terms of the outstanding service debtors as at 30 June (Total outstanding service debtors/ revenue received for services)
		7C Debt coverage by own billed revenue (NKPI – 10g(iii))	7C Ration of debt coverage by own billed revenue	This is a calculation where we take the total own billed revenue divided by the total debt. Financial viability measured in terms of the Municipality's ability to meet its service debt obligations as at 30 June (Short Term Borrowing + Bank Overdraft + Short Term Lease + Long Term Borrowing + Long Term Lease) / Total Operating Revenue - Operating Conditional Grant)
		7D Bank Account Reconciliation	7d Reconciliation of bank account within 30 days after month end	Reconciliation of bank account within 30 days after month end is the norm. This must be achieved 12 times per annum (each month) To be calculated as the number of months per annum that the Municipality has reconciled the bank account within 30 days of month end and submitted to Council.

CHAPTER 6: FINANCIAL PLAN

Section 26 of chapter 5 of the Local Government Municipal Systems Act, No 32 of 2000 prescribes the core components of the Integrated Development Plan (IDP). Section 26(h) requires the inclusion of a financial plan, which should include a budget projection for at least the next three years. This financial plan aims to determine the financial affordability and sustainability levels of the Municipality over the medium term.

The Municipal Budget and Reporting Regulations (MBRR) (part 2: “Budget-related policies of municipalities”) require the accounting officer to see to it that budget-related policies are prepared and submitted to Council. One of these is the long term financial plan policy, which aims to ensure that all long term financial planning is based on a structured and consistent methodology, thereby securing the Municipality’s long term financial affordability and sustainability.

A Municipality’s financial plan integrates the financial relationships of various revenue and expenditure streams to give effect to the IDP. It provides guidance for the development of current budgets and assesses financial impacts on outer years’ budgets by incorporating capital expenditure outcomes, operating expenditure trends, optimal asset management plans and the consequential impact on rates, tariffs and other service charges.

The Municipality has to do long term financial planning in order to determine the appropriate mix of financial parameters and assumptions within which the Municipality should operate to facilitate budgets that are affordable and sustainable at least ten years into the future. This helps to identify the consequential financial impact of planned capital projects on the Municipality’s operating budget. The planning is reviewed annually to determine the most affordable level at which the Municipality can operate optimally, taking into account the fiscal overview, economic climate, national and provincial influences, IDP and other legislative imperatives, internal governance and community consultation.

6.1 Financial strategy

The 2017/18 MTREF period represents the first year of the Municipality’s next five-year IDP horizon. It commenced with a technical analysis of previous years’ performance outcomes, an assessment of the economic outlook, and consultation with various role players. The process encompassed the following:

- Framework for and strategic direction of the budget;
- Forecast taking above direction into account.
- Departmental budget presentations to execute the Municipality's strategies, business improvement measures and implementation readiness of capital programmes.
- Utility Services presentations on their proposed budgets and tariff increases.
- Key Financial Drivers

Ensuring congruence between the Municipality's strategy and budget included alignment with the:

- IDP;
- Development Strategies;
- Core economic, financial and technical data obtained at local and national level; and
- Other issues, policies and strategies stemming deemed important in this regard.

6.2 Management and governance frameworks

The outcome of the modelling incorporated the above as well as the assumptions outlined below. The principles applied to the MTREF in determining and maintaining an affordability envelope included:

- higher-than-inflation repairs and maintenance provision to ensure and enhance the preservation of municipal infrastructure;
- higher increases to selected cost elements subjected to higher-than-average inflationary pressure, such as staff costs;
- the assumption of a 100% capital expenditure implementation rate;
- credible collection rates based on collection achievements to date, and also incorporating anticipated improvements in selected revenue items; and
- national and provincial allocations as per the 2016 Division of Revenue Act (DORA) and
- Province's 2017/18 MTREF allocations circular to municipalities.

6.3 Economic outlook/external factors

The slowdown in emerging markets has led to downward revisions of economic growth forecasts, particularly for developing countries. The sluggish growth experienced in the South African economy is exacerbated by the lower export commodity prices, drought conditions, constraints in electricity supply and a decline in business confidence. According to the Bureau of Economic Research (BER),

real growth is projected to average 1,6% over the next three years. It is expected that the factors causing the slow growth, such as the electricity constraints, will improve in the next two years.

The value of the rand against the US dollar has declined continuously over the past five years, which can be attributed to various factors, including the decline in global commodity prices, poor business confidence and the electricity supply crisis. The BER projects that over the medium term, the rand is expected to stabilise at an average of R16, 60 against the dollar.

Oil prices declined over the past year, mainly driven by the supply of the commodity exceeding its demand. The fall in the oil price partly cushioned the impact of the weaker rand exchange rate. Oil prices are projected to average \$38, 60 per barrel over the medium term. The consumer price index (CPI) has fluctuated between 4, 3% and 6, 1% over the past five years, but is expected to surpass the South African Reserve Bank (SARB) inflation target range of between 3% and 6%. CPI forecasts for at least the next two years are expected to remain above the 6% upper inflation target, as per the latest BER forecast.

The Municipality's CPI forecast for the next three financial years is 5, 5%. The national inflation forecast set out in National Treasury Circular 78 is 6%, 5, 8% and 5, 8% for the national fiscal years 2016 to 2018, while Circular 79 provided updated CPI projections of 6, 6%, 6, 2% and 5, 9% for the same years.

6.4 National and provincial influences

In drafting the MTREF, the following national and provincial influences received special attention:

a) Medium-Term Budget Policy Statement (MTBPS)

The MTBPS highlighted that the South African economy had grown slower compared to what was projected at the beginning of 2015. This slow growth is due to various factors, which include the global growth slowdown, energy constraints, weak business confidence and low household demand.

To maintain healthy public finances and support social and economic transformation, the MTBPS set out the following measures:

- Strengthen economic performance to facilitate policy coherence and certainty where it is lacking, to give greater impetus to infrastructure investment, and to address impediments to enterprise development, employment and innovation.
- Build the energy capacity, water and transport networks and communication systems we need, expanding investments by state-owned companies and the private sector alongside departmental and municipal initiatives.
- Ensure that public debt remains affordable and that the public expenditure ceiling is maintained, while flagship social and economic programmes are protected.
- Improve living standards and accelerate social development, working with municipalities to strengthen planning and concentrate investment in urban hubs and economic growth zones.
- Enhance state capacity and the quality and integrity of governance, reinforce financial management and procurement reforms, and step up public-sector training and institutional renewal.
- Rapidly implement the National Development Plan, working with the business sector, organised labour and social stakeholders to maintain a stable labour relations environment, improve confidence and promote broad-based development.

With regard to the measures above, the Municipality is continuously investing in the Expanded Public Works Programme (EPWP) and to implement cost containment measures, including reducing the cost of national and international travel, catering and entertainment. These measures are revisited and assessed on an annual basis to ensure that maximum efficiencies are attained.

b) National Treasury Municipal Financial Management Act (MFMA) circulars.

The key circulars relating to the MTREF are as follows:

- MFMA Circular 78, which mainly focused on the 2016 local government elections, the demarcation process, and the changes to the local government grant allocations. It included and advised on, inter alia, the following:
- Local government reforms and changes to the fiscal framework, including allocations, grants, MBRR requirements, reporting indicators and the Municipal Standard Chart of Accounts (mSCOA).
- The need for a conservative approach in projecting revenue as economic challenges continues to put pressure on municipal revenue generation and collection. These circumstances make it essential for municipalities to reprioritise expenditure and implement

stringent cost-containment measures. Keeping increases in rates, tariffs and other charges at levels that reflect an appropriate balance between the interests of poor households and other customers, and ensure the financial sustainability of the Municipality.

- Ensuring that municipalities' tariffs are adequate to at least cover the costs of bulk services, as well as ensuring that all properties are correctly billed for property rates and all services rendered.
- Guidelines for the MTREF electricity, water and sanitation tariffs.

Considering improving the effectiveness of revenue management processes and procedures, paying special attention to cost containment measures by, inter alia, controlling unnecessary spending on nice to- have items and non-essential activities.

MFMA Circular 79, which provided a summary and update of the country's economic outlook, inflationary targets, financial management issues, how to give effect to National Treasury's MBRR, and the impact of the 2016 local government elections on municipalities. It included the following:

- Reviewing how municipalities conduct their business to ensure that value for money is obtained in all expenditure, that revenue administration systems are operating effectively, that borrowing programmes are realistic, and that creditors (including bulk service providers) continue to be paid timeously and in full.
- Re-evaluating the costs and benefits of universal or targeted provision of free basic services subsidies in order to protect their delivery to poor households in particular.
- Examining the cost structure of providing electricity services, and applying to NERSA for electricity tariff increases that reflect the total cost of providing the service so that municipalities can work towards achieving financial sustainability.
- An update on regulations to be issued on cost containment measures applicable to local government.

6.5 EXPENDITURE ANALYSIS

A three-year preview

General inflation outlook and its impact on municipal activities: CPI projected for the Municipality is 6, 4% for 2017/18, 5, 7% for 2018/19 and 5, 6% for 2019/20 of the MTREF period. These levels are within the SARB inflation targeting range of between 3% and 6%, and are depicted in the graph below.

Management and governance framework

The Municipality's projected inflation rate is to remain below 6%. However, various budget elements, including salaries, repairs and maintenance, interest and depreciation cost, will experience higher-than-CPI increases. This creates a fiscal gap, which necessitates higher than-CPI increases.

Interest rates for borrowing and investment of funds: Borrowing interest rates are factored in at a rate of 10% for 2017/18 and 11% for each of the outer years. An average investment interest rate of 7% is forecast over the MTREF.

Collection rate for revenue services: In accordance with relevant legislation and national directives, the Municipality's projected revenue recovery rates are based on realistic and sustainable trends. In calculating the debt impairment, the following collection rates were applied:

- Rates 96%
- Electricity 98%
- Water 88%
- Sanitation 89%
- Refuse 90%
- Housing 55%

The collection rates for rates and service charges are expected to remain constant over the MTREF period, except for refuse services. On-going debt management initiatives are being implemented, which are intended to improve the collection rate to targeted levels. The housing collection rate is also expected to increase over the MTREF period.

Salary increases

A three-year salary and wage collective agreement with Unions. In the absence of an agreement for the outlying years of this MTREF period, the provisions for 2017/18 were assumed for those years as well. In terms of the agreement, the salary and wage increases are to be annually calculated for all three years using the average CPI for the period 1 February of the previous year to 31 January of the forecast budget year + 1%. This formula was used in determining the staff cost provisions over the MTREF.

Ensuring maintenance of existing assets

Repairs and maintenance: National Treasury Circular 78 reminded municipalities to consider the budget management issues discussed in previous circulars. Circulars 54, 55 and 58 stressed the importance of securing the health of a Municipality's asset base by increased spending on repairs and maintenance. Circular 55 further stated that "allocations to repairs and maintenance, and the renewal of existing infrastructure must be prioritised. Municipalities must provide detailed motivations in their budget documentation if allocations do not meet the benchmarks".

Circulars 55 and 70 set the ratio of operational repairs and maintenance to asset value (write-down value) of the Municipality's property, plant and equipment (PPE) at 8%. The Municipality averages 6, 6% over the MTREF period. To give effect to the above directives, but still ensure that rates and tariffs are affordable, repairs and maintenance was budgeted at 1% above CPI over the MTREF period, as opposed to 3% above CPI in previous years.

Operating financing of capital

Depreciation: Calculation of depreciation on new capital expenditure is based on variables such as asset class and lifespan, depending on the nature of the asset. An annual capital expenditure implementation rate of 100% was assumed. Depreciation of existing assets is calculated based on simulated SAP data that reflect actual values per annum. Assets under construction (AUC) are calculated based on asset class lifespan and projected capitalisation dates.

Borrowing and credit rating outlook: The Municipality's borrowing occurs in terms of chapter 6 of the MFMA, according to which a long term loan will only be entered into if it is affordable and sustainable. This is also influenced by the capital investment requirement over the MTREF period.

The Municipality's credit rating demonstrates the administration's ability to meet its short- and long term financial obligations. Potential lenders also use the rating to assess the Municipality's credit risk, which in turn affects the pricing of any subsequent loans taken. Factors used to evaluate the creditworthiness of municipalities include the economy, debt, finances, politics, management and institutional framework.

6.6 Revenue analysis – a three-year preview

Growth or decline in municipal tax base

a) Growth or decline in municipal tax base

The current unstable economic climate has restricted material service growth projections. The respective projected growth for the Municipality's services is as follows:

Rates: Service growth for rates is projected at 0, 25% for the 2017/18 to 2020/21 financial years, and is expected to increase to 1% in the years thereafter. The projected growth can be ascribed to economic growth that is not at sustainable levels to encourage new developments and/or home improvements. This position is expected to improve in the third year of the MTREF.

Water and sanitation: Water and sanitation projected zero growth over the next three years there is an expected physical reduction as a result of water restrictions. However, due to the adjusted tariff levels, this is neutral revenue within the MTREF projections. Projections are based on the latest trends flowing from current economic conditions as well as water-saving initiatives.

Electricity: Electricity has projected a 1, 88% annual growth on sales revenue over the MTREF period due to the impact of increasing tariffs.

Refuse: A 2% service growth was applied over the MTREF period for refuse. This is as a result of growth in the demand for refuse services. The adverse impact of the current economic climate, the demand for new and upgraded infrastructure, savings initiatives and lower demand for services made tariff increases at higher-than-CPI levels inevitable.

Property rates: An average rates tariff increase of 8% is proposed for the next three financial years. The higher than- CPI increases will provide for recurring operating costs, new budget realities as well as investments in new infrastructure for rates funded services. Further contributing factors include lower projected rates service growth and higher-than-CPI salary and capital cost increases.

Electricity: Eskom submitted a regulatory clearing account (RCA) application for the first year of the third multi-year price determination (MYPD3) period, i.e. the 2013/14 financial year. NERSA assessed Eskom's application and announced on 1 March 2016 the approval of an electricity tariff increase of 9, 4% for 2016/17. The Municipality will apply a 1, 88% revenue increase for the next three financial years. Business for this service comprises the purchasing and redistribution of

electricity, with bulk purchases averaging 63% of the service's total budget. The higher-than-CPI average electricity tariff increase is therefore mostly attributed to the NERSA-approved Eskom increase on bulk purchases, which is 7, 8% for the 2016/17 financial year. In addition, electricity sales are reducing due to energy-saving plans, load-shedding as well as elasticity as a result of increasing tariffs. This increase will also provide for the continual operating costs of the service as well as investments in new infrastructure.

Water and sanitation: According to National Treasury Circular 78, “municipalities should consider the full cost of rendering the water and sanitation services when determining tariffs related to these two services. If the tariffs are low and result in the Municipality not recovering their full costs, the Municipality should develop a pricing strategy to phase-in the necessary tariff increases in a manner that spreads the impact on consumers over a period of time”. Mindful of this, the water and sanitation average tariff increase was set at 8% for 2017/18 and 8% for each of the two outer years of the MTREF period.

The higher-than-CPI tariff increase is due to various factors, including the financial impact of the capital programme (new infrastructure, expansion and rehabilitation of current infrastructure to address capacity constraints and ensure system efficiency), repair and maintenance programmes, cost of the social package provided, and recurring operating costs. Due to the current climatic conditions, water restrictions was introduced accompanied by a 20% reduction-level tariff. This tariff will be applicable for the next three financial years until further decisions regarding the water restrictions are made.

Solid waste: Circular 78 reminds municipalities that budget management issues dealt with in previous circulars are still applicable. Circular 70 advised that “in many instances waste tariffs do not cover the cost of providing the different components of the service. Where this is the case, municipalities should aim to have appropriately structured, cost reflective solid waste tariffs in place by 2015”. Solid waste charges two tariffs, namely for disposal and for refuse. The average disposal tariff increase for 2017/18 is 8%, while the increase for the two outer years is 7% and 8% respectively. These increases are required for capital investment and related operating expenses.

Housing rental (Council rental properties): The monthly rental charge for the Municipality's housing rental properties is based on a rate per square metre applied to the size of the unit being rented, coupled with a set of premiums/deductions based on the location, maintenance level and facilities of the specific property.

Through addressing the economic challenges faced by many poorer residents, particularly those residing in municipal rental stock, the total average increase in rental charges 2017/18 has been retained at an affordable level, namely an annual increase of 0%. Acknowledging the on-going multi-year implications of inflation on the costs associated with the management of rental properties, including the maintenance of the properties as well as administrative costs, the annual increase in rental charges is not directly aligned with the full economic cost of operating the rental units. Instead, the Municipality subsidises the difference between the rental based on economic cost recovery (CPI-linked) and the actual amount charged.

Equitable share

The reviewed equitable share formula includes a subsidy for the provision of free basic water, electricity, sanitation and refuse removal services to the poor. It also provides funds for the institutional costs of municipalities, and a community services component that provides funding towards the provision of core municipal services not included under basic services.

To ensure that the funds for institutional costs and non-trading services are targeted at poorer municipalities, the formula applies a revenue adjustment factor reflecting municipalities' ability to generate their own revenue. The revised formula used statistics from the 2011 Census, which are to be updated annually to reflect estimated population growth and projected increases in the cost of services such as water and electricity. Equitable share provisions included in the budget are based on the 2017 DORA. The following amounts were allocated to the Municipality:

Collection Rates

- Rates 96%
- Electricity 98%
- Water 88%
- Sanitation 89%
- Refuse 90%
- Housing 55%

Revenue Parameters

- Rates 8%
- Electricity 1, 88%

- Water 8%
- Sanitation 8%
- Refuse 8%

Growth Parameters

- Rates 0, 25%
- Electricity -1, 5% -
- Water 0%
- Sanitation 0%
- Refuse 2%

Expenditure Parameters

- Salary increase
- Salary increase (South African Local Government Bargaining Council agreement) 7, 5%, 7%,
7% Increment provision 2% per annum
- Interest rates
- Interest paid 10%
- Interest on investment 6%

6.7 REVENUE

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

Functional Classification Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework		
R thousand	1	Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
<u>Revenue - Functional</u>				
<i>Municipal governance and administration</i>		30,947	34,562	36,867
Executive and council		2,738	5,071	5,450
Mayor and Council		2,498	4,711	4,970
Municipal Manager, Town Secretary and Chief Executive		240	360	480
Finance and administration		28,208	29,492	31,418
Administrative and Corporate Support		505	–	–
Asset Management		–	–	–
Budget and Treasury Office		–	–	–
Finance		27,268	29,151	31,158
Property Services		435	341	260
Internal audit		–	–	–
Governance Function		–	–	–
Community and public safety		4,166	3,491	3,699
Community and social services		2,106	2,197	2,327

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

<i>Cemeteries, Funeral Parlours and Crematoriums</i>		23	7	8
<i>Child Care Facilities</i>		–	–	–
<i>Community Halls and Facilities</i>		55	123	132
<i>Libraries and Archives</i>		2,028	2,067	2,187
Sport and recreation		–	21	22
<i>Recreational Facilities</i>		–	21	22
<i>Sports Grounds and Stadiums</i>		–	–	–
Public safety		–	1,240	1,315
<i>Fire Fighting and Protection</i>		–	1,240	1,315
<i>Licensing and Control of Animals</i>		–	–	–
Housing		2,060	32	35
<i>Housing</i>		2,060	32	35
<i>Informal Settlements</i>		–	–	–
<i>Economic and environmental services</i>		18,026	17,373	17,816
Planning and development		–	–	–
Road transport		18,026	17,373	17,816
<i>Police Forces, Traffic and Street Parking Control</i>		6,606	6,670	6,761
<i>Road and Traffic Regulation</i>		–	–	–
<i>Roads</i>		11,420	10,703	11,055
<i>Taxi Ranks</i>		–	–	–

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

<i>Trading services</i>		107,339	167,697	197,629
Energy sources		57,608	69,009	79,153
<i>Electricity</i>		57,608	69,009	79,153
<i>Street Lighting and Signal Systems</i>		–	–	–
<i>Nonelectric Energy</i>		–	–	–
Water management		14,485	15,370	16,519
<i>Water Treatment</i>		–	–	–
<i>Water Distribution</i>		14,485	15,370	16,519
<i>Water Storage</i>		–	–	–
Waste water management		25,426	73,064	90,988
<i>Public Toilets</i>		–	–	–
<i>Sewerage</i>		25,426	73,064	90,988
<i>Storm Water Management</i>		–	–	–
<i>Waste Water Treatment</i>		–	–	–
Waste management		9,820	10,254	10,970
<i>Recycling</i>		–	–	–
<i>Solid Waste Disposal (Landfill Sites)</i>		–	–	–
<i>Solid Waste Removal</i>		9,820	10,254	10,970
<i>Street Cleaning</i>		–	–	–
Total Revenue - Functional	2	160,478	223,124	256,012

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

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TABLE 46: LONG TERM FINANCIAL PLAN – REVENUE**6.8 Capital Budget**

The Capital budget is funded wholly from external grant funding and is aligned with Key Performance Area 1 – Reliable infrastructure.

WC041 Kannaland - Table A5 Budgeted Capital Expenditure by vote, functional classification and funding

Vote Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework		
R thousand	1	Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
<u>Capital expenditure - Vote</u>				
<u>Single-year expenditure to be appropriated</u>	2			
Vote 4 - Technical Services		30,801	83,168	106,298
Vote 5 - CALITZDORP SPA		–	–	–
Capital single-year expenditure sub-total		30,801	83,168	106,298
Total Capital Expenditure - Vote		30,801	83,168	106,298
<u>Capital Expenditure - Functional</u>				
Trading services		20,949	73,000	95,796
Energy sources		8,000	13,000	18,796

WC041 Kannaland - Table A5 Budgeted Capital Expenditure by vote, functional classification and funding

Water management		12,949	60,000	77,000
Other		9,852	10,168	10,502
Total Capital Expenditure - Functional	3	30,801	83,168	106,298
<u>Funded by:</u>				
National Government		30,801	83,168	106,298
Transfers recognised - capital	4	30,801	83,168	106,298
Internally generated funds		–	–	–
Total Capital Funding	7	30,801	83,168	106,298

TABLE 47: CAPITAL EXPENDITURE**6.9 Budget Summary (A4)**

WC041 Kannaland - Table A4 Budgeted Financial Performance (revenue and expenditure)

Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework		
R thousand	1	Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
<u>Revenue By Source</u>				
Property rates	2	15,956	17,232	18,611
Service charges - electricity revenue	2	44,425	50,861	54,930

WC041 Kannaland - Table A4 Budgeted Financial Performance (revenue and expenditure)

Service charges - water revenue	2	11,329	12,236	13,215
Service charges - sanitation revenue	2	7,744	8,363	9,033
Service charges - refuse revenue	2	5,760	6,221	6,719
Service charges - other		–	–	–
Rental of facilities and equipment		308	333	359
Interest earned - external investments		600	636	674
Interest earned - outstanding debtors		3,856	4,164	4,497
Dividends received		3	3	3
Fines, penalties and forfeits		5,503	5,522	5,522
Licences and permits		295	319	344
Agency services		755	816	881
Transfers and subsidies		32,310	31,476	33,046
Other revenue	2	834	1,774	1,881
Gains on disposal of PPE		–	–	–
Total Revenue (excluding capital transfers and contributions)		129,677	139,956	149,714
<u>Expenditure By Type</u>	-			
Employee related costs	2	50,727	54,481	58,512
Remuneration of councillors		3,056	3,283	3,526
Debt impairment	3	14,395	15,412	15,657

WC041 Kannaland - Table A4 Budgeted Financial Performance (revenue and expenditure)

Depreciation & asset impairment	2	10,549	10,593	10,602
Finance charges		800	488	288
Bulk purchases	2	30,864	35,832	38,698
Other materials	8	–	–	–
Contracted services		–	–	–
Transfers and subsidies		–	–	–
Other expenditure	4, 5	19,282	19,186	21,971
Loss on disposal of PPE		–	–	–
Total Expenditure		129,673	139,274	149,254
Surplus/(Deficit)		4	681	460
Transfers and subsidies - capital (monetary allocations) (National / Provincial and District)		30,801	83,168	106,298
Transfers and subsidies - capital (monetary allocations) (National / Provincial Departmental Agencies, Households, Non-profit Institutions, Private Enterprises, Public Corporations, Higher Educational Institutions)	6	–	–	–
Transfers and subsidies - capital (in-kind - all)		–	–	–
Surplus/(Deficit) after capital transfers & contributions		30,805	83,849	106,758
Taxation		–	–	–
Surplus/(Deficit) after taxation		30,805	83,849	106,758

WC041 Kannaland - Table A4 Budgeted Financial Performance (revenue and expenditure)

Attributable to minorities		–	–	–
Surplus/(Deficit) attributable to municipality		30,805	83,849	106,758
Share of surplus/ (deficit) of associate	7	–	–	–
Surplus/(Deficit) for the year		30,805	83,849	106,758

TABLE 48: 6.9 BUDGET SUMMARY (A4)

6.10 Budget Financial Performance (A2)

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

Functional Classification Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework		
R thousand	1	Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
<u>Revenue - Functional</u>				
<i>Governance and administration</i>		30,947	34,562	36,867
Executive and council		2,738	5,071	5,450
Finance and administration		28,208	29,492	31,418
Internal audit		–	–	–
<i>Community and public safety</i>		4,166	3,491	3,699
Community and social services		2,106	2,197	2,327
Sport and recreation		–	21	22

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

Public safety		–	1,240	1,315
Housing		2,060	32	35
Health		–	–	–
<i>Economic and environmental services</i>		18,026	17,373	17,816
Planning and development		–	–	–
Road transport		18,026	17,373	17,816
Environmental protection		–	–	–
<i>Trading services</i>		107,339	167,697	197,629
Energy sources		57,608	69,009	79,153
Water management		14,485	15,370	16,519
Waste water management		25,426	73,064	90,988
Waste management		9,820	10,254	10,970
<i>Other</i>	4	–	–	–
Total Revenue - Functional	2	160,478	223,124	256,012
<u>Expenditure - Functional</u>	-			
<i>Governance and administration</i>		44,089	46,911	50,234
Executive and council		11,897	12,994	14,005
Finance and administration		32,192	33,918	36,229
Internal audit		–	–	–

WC041 Kannaland - Table A2 Budgeted Financial Performance (revenue and expenditure by functional classification)

<i>Community and public safety</i>		6,076	4,345	4,615
Community and social services		2,829	3,111	3,331
Sport and recreation		785	771	787
Public safety		–	–	–
Housing		2,462	463	497
Health		–	–	–
<i>Economic and environmental services</i>		15,014	14,148	14,135
Planning and development		–	–	–
Road transport		15,014	14,148	14,135
Environmental protection		–	–	–
<i>Trading services</i>		64,494	73,870	80,270
Energy sources		36,863	43,160	47,201
Water management		12,035	14,167	16,062
Waste water management		8,767	9,287	9,703
Waste management		6,828	7,255	7,305
<i>Other</i>	4	–	–	–
Total Expenditure - Functional	3	129,673	139,274	149,254
Surplus/(Deficit) for the year		30,805	83,849	106,758

6.11 Borrowings

The Municipality has long-term loans of R 1.8 million and a total borrowing liability of R 3.62 million but will not borrow any further over the next three financial years.

6.12 Transfer and grant receipts (SA18)

WC041 Kannaland - Supporting Table SA18 Transfers and grant receipts				
Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework		
R thousand		Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
RECEIPTS:	1, 2			
-				
<u>Operating Transfers and Grants</u>				
National Government:		27,687	28,844	30,274
Local Government Equitable Share		24,023	25,909	27,321
Finance Management		2,145	2,400	2,400
EPWP Incentive		1,000	–	–
MIG - PMU		519	535	553
Provincial Government:		4,623	2,632	2,772
Financial Mngt Capacity Building		240	360	480

WC041 Kannaland - Supporting Table SA18 Transfers and grant receipts

Human Settlement		2,030	–	–
Library		1,980	2,061	2,181
CDW		111	111	111
Thusong centre Grant		212	100	–
Fin assistance for road maint		50	–	–
District Municipality:		–	–	–
<i>[insert description]</i>		–	–	–
Other grant providers:		–	–	–
<i>[insert description]</i>		–	–	–
Total Operating Transfers and Grants	5	32,310	31,476	33,046
<u>Capital Transfers and Grants</u>				
National Government:		30,801	83,168	106,298
Municipal Infrastructure Grant (MIG)		9,852	10,168	10,502
Regional Bulk Infrastructure		12,949	60,000	77,000
Integrated National Electrification Programme		8,000	13,000	18,796
Other capital transfers/grants <i>[insert desc]</i>				

WC041 Kannaland - Supporting Table SA18 Transfers and grant receipts				
Provincial Government:		–	–	–
Other capital transfers/grants [insert description]		–	–	–
District Municipality:		–	–	–
[insert description]		–	–	–
Other grant providers:		–	–	–
[insert description]		–	–	–
Total Capital Transfers and Grants	5	30,801	83,168	106,298
TOTAL RECEIPTS OF TRANSFERS & GRANTS		63,110	114,644	139,344

TABLE 49: 6.12 TRANSFER AND GRANT RECEIPTS (SA18)**6.13 Table SA 14**

WC041 Kannaland - Supporting Table SA14 Household bills					
Description	Ref	2017/18 Medium Term Revenue & Expenditure Framework			
		Budget Year 2017/18	Budget Year 2017/18	Budget Year +1 2018/19	Budget Year +2 2019/20
		Rand/cent	% incr.		

WC041 Kannaland - Supporting Table SA14 Household bills

<u>Monthly Account for Household - 'Middle Income Range'</u>	1				
Rates and services charges:					
Property rates		8.0%	747.69	792.55	840.11
Electricity: Basic levy					
Electricity: Consumption		8.0%	1,721.52	1,824.81	1,934.30
Water: Basic levy		8.0%	79.02	83.76	88.79
Water: Consumption		8.0%	220.35	233.57	247.59
Sanitation		8.0%	173.09	183.48	194.49
Refuse removal		8.0%	179.92	190.71	202.15
Other		8.0%	–	–	–
sub-total		–	3,121.60	3,308.89	3,507.42
VAT on Services					

WC041 Kannaland - Supporting Table SA14 Household bills

			437.02	463.24	491.04
Total large household bill:		–	3,558.62	3,772.14	3,998.46
% increase/-decrease			–	6.0%	6.0%
-					
<u>Monthly Account for Household - 'Affordable Range'</u>	2				
Rates and services charges:					
Property rates		8.0%	529.39	561.15	594.82
Electricity: Basic levy					
Electricity: Consumption		8.0%	826.20	875.77	928.32
Water: Basic levy		8.0%	79.02	83.77	88.79
Water: Consumption		8.0%	169.81	180.00	190.80
Sanitation		8.0%	173.09	183.48	194.49
Refuse removal		8.0%			

WC041 Kannaland - Supporting Table SA14 Household bills

			179.92	190.71	202.15
Other					
sub-total		-	1,957.43	2,074.87	2,199.37
VAT on Services			274.04	290.48	307.91
Total small household bill:		-	2,231.47	2,365.36	2,507.28
% increase/-decrease			-	6.0%	6.0%
-					
<u>Monthly Account for Household - 'Indigent' Household receiving free basic services</u>	3				
Rates and services charges:					
Property rates		#DIV/0!	311.08	329.75	349.53
Electricity: Basic levy			-	-	-
Electricity: Consumption		#DIV/0!	495.72	525.46	556.99
Water: Basic levy					

WC041 Kannaland - Supporting Table SA14 Household bills

			–	–	–
Water: Consumption		#DIV/0!	90.95	96.40	102.19
Sanitation			–	–	–
Refuse removal			–	–	–
Other			–	–	–
sub-total		–	897.75	951.62	1,008.71
VAT on Services		#NAME?	125.69	133.23	141.22
Total small household bill:		–	1,023.44	1,084.84	1,149.93
% increase/-decrease			–	6.0%	6.0%
-					
<u>References</u>					

TABLE 50: 6.12 TRANSFER AND GRANT RECEIPTS (SA18)

Chapter 7: Sector Planning

The below table indicates a list of critical Master, Operations and Maintenance plans that urgently need to be developed or reviewed. The management has highlighted the need for these critical plans at various IGR forums such as LGMTEC, MGRO and “Back to Basics” meetings. A formal request has been directed to the department of COGTA in specific Municipal Infrastructure Support Agency (MISA). MISA has agreed to assist the municipality with a revenue enhancement strategy and road and storm water master plan. In the absence of these plans, Council and management will be unable to do credible infrastructure planning and maintenance. It should be noted that once the council revised the objectives than the alignment will be re-designed as illustrated below.

7.1 Status Quo Master Plans, Operational, Maintenance and other plans

Plan	Status	Adopted by Council	KPA Alignment
Water Master Plan	Complete and will be reviewed in the 2015/16 financial year.	February 2012.	KPA 1
Sewage Master Plan	Complete and will be reviewed in the 2015/16 financial year	October 2009.	KPA 1
Roads and Storm water Management Plan	Not completed. The municipality plans to develop this plan during the 2015/16 financial year	In process	KPA 1
Spatial Development Framework	Completed	November 2013. The SDF will be updated / review in the 2016/17 financial year	KPA 1,2,3,4,5
Integrated Transport Plan	Completed	May 2014	KPA 3
Disaster Management Plan	Completed	March 2012. The plan will be reviewed May 2016	KPA 3
Waste Management Strategy	In process but not finalised as yet	Completed in May 2015	KPA 1 and 3
Human Settlement Plan	The HSP is in draft form.	The HSP will be completed by end May 2016	KPA 1 and 4

Plan	Status	Adopted by Council	KPA Alignment
Bulk Infrastructure Development Plan	Completed	August 2012	KPA 1
Bulk Infrastructure Master Plan: Sanitation	Complete	February 2012	KPA 1
Local Economic Development Strategy	Completed	May 2013	KPA 4
Air quality management Plan	Completed. A draft air quality management was developed with assistance of Provincial Government and adopted 2013/14 financial year. The document will be reviewed in the 2016/17 financial period	May 2014	KPA 3
Integrated Water Management Strategy for Ladismith (Storage, boreholes, water rights, runoff)	In process and plan to be completed in the 2016/17 financial year.	Will be developed in the 2016/17 financial year	KPA 1
Integrated Municipal Infrastructure Plan	Not developed as yet – plan to commence with the process in 2016/17	Not developed as yet – plan to commence with the process in 2016/17	KPA 1
Integrated Infrastructure Asset Management Plan	Not developed as yet – plan to commence with the process in 2014/15	Not developed as yet – plan to commence with the process in 2016/17	KPA 1 and 7
Electricity Master Plan	Not developed as yet – plan to commence with the process in 2014/15	Not developed as yet – plan to commence with the process in 2016/17	KPA 1 and 2
Water Services Development Plan	Completed	-	KPA 1 and 2
Spatial Investment Maps	May 2016	Will be finalised with the final budget and IDP	KPA 4
Fleet maintenance plan	Not yet developed – plan to commence with the process in 2016/17	-	KPA 6

Plan	Status	Adopted by Council	KPA Alignment
Performance Management Framework	In review process	Will be adopted by council end May 2016	KPA 5
Water Revenue Management	Plan needs to be developed	This will form part of the revenue enhancement plan	KPA 7
Electricity Revenue Management Strategy	Plan needs to be developed	This will form part of the revenue enhancement plan	KPA 7
Water Safety Plan	Plan needs to be developed	This will form part of the revenue enhancement plan	KPA 3
Credit control and debt management plan	Plan needs to be developed	This will form part of the revenue enhancement plan	KPA 7
Water conservation and Demand Management Plan	No Plan in place	-	KPA 2

TABLE 51: STATUS QUO MASTER PLANS, OPERATIONAL, MAINTENANCE AND OTHER PLANS

7.2 Relationship between sectoral plans:

	Spatial Development Framework (KPA 1,2,3,4 and 5)	Zoning Scheme (KPA 4)	Housing Plan (KPA 4)	Integrated Transport Plan (KPA 3)	Infrastructure Master Plans (KPA 1)
Spatial Development Framework (KPA 1,2,3,4 and 5)			Identifies municipal growth direction Identifies areas to be protected (e.g. agriculture and nature)	Identifies municipal growth direction Identifies areas to be protected (e.g. agriculture and nature)	Identifies municipal growth direction Identifies areas to be protected (e.g. agriculture and nature) Identifies housing

	Spatial Development Framework (KPA 1,2,3,4 and 5)	Zoning Scheme (KPA 4)	Housing Plan (KPA 4)	Integrated Transport Plan (KPA 3)	Infrastructure Master Plans (KPA 1)
			nature)Identifies areas for economic development Identifies housing priority areas	areas for economic development Identifies housing priority areas	priority areas Identifies areas for economic development Identifies Infrastructure priority areas
Zoning Scheme (KPA 4)	Translates nature and form of urban development needed into supportive regulations		Provides for overlay zones meeting the specific requirements of different human settlements	Provides for land use regulations that supports public transport Indicates extent of land use right requiring services	Provides for land use regulations that supports efficient infrastructure provision Indicates extent of land use right requiring services
Housing Plan (KPA 4)	Identifies current settlements and interventions which should be accommodated in future planning	Identifies nature and form of human settlement development which is affordable		Identifies current settlements and interventions which should be accommodated in future planning	Identifies current settlements and interventions which should be accommodated in future planning
Integrated Transport Plan (KPA3)	Identifies transport and roads priority areas	Identifies ideal route classification	Identifies transport and roads priority areas		Identifies transport and roads priority areas
Infrastructure Master Plan (KPA 1)	Identifies existing infrastructure capacity/constrain	Identifies existing infrastructure	Identifies existing infrastructure	Identifies existing infrastructure capacity/constrai	

	Spatial Development Framework (KPA 1,2,3,4 and 5)	Zoning Scheme (KPA 4)	Housing Plan (KPA 4)	Integrated Transport Plan (KPA 3)	Infrastructure Master Plans (KPA 1)
	ts Identifies interventions required to support growth/infill	capacity/constr aints	capacity/constr aints Identifies interventions required to support growth/infill	nts Identifies interventions required to support growth/infill	

TABLE 52: RELATIONSHIP BETWEEN SECTOR PLANS

7.3 List of Statutory, Strategic and Operational Plans

STATUTORY PLANS

- ✓ IDP and Process Plan (Budget Time Schedule of Events for the Approval of the Budget and IDP)
- ✓ Spatial Development Framework
- ✓ Municipal Disaster Risk Management Plan
- ✓ Integrated Human Settlements Plan
- ✓ Comprehensive Integrated Transport Plan (inclusive in document)
- ✓ Integrated Waste Management Plan (IWMP)

STRATEGIC AND OPERATIONAL PLANS (can be obtained on request)

- ✓ Economic Development Strategy
- ✓ Water Services Departmental Sector Plan
- ✓ 2015/16 Annual Report and oversight report
- ✓ Air Quality Management Plan (AQMP)
- ✓ Comprehensive Integrated Transport Plan
- ✓ Integrated Waste Management Plan (IWMP)

Addendum 1 - Financial Recovery Plan

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
Programme 1: Budgeting and Expenditure Management	Review budgeting process, principles and strategy as well as expenditure management systems to ensure efficient and effective service delivery in line with Kannaland Municipality priorities.	Prepare and implement 2016/17 Adjustment Budget	Finance	February 2017	March 2017	Adjustment budget completed	Not started
		Prepare and table the 2017/18 MTREF Budget	Finance	March 2017	May 2017	Credible MTREF Budget	Not started
		Developing long-term Financial Plan to inform budget and financial operational planning	Finance	March 2017	June 2018	Adopted LTFP	Not started
		Institutionalise pre-determined creditors payment dates and implement expenditure and creditors management.	Finance CFO	January 2017	On-going	Fixed creditors payment dates determined and management of expenditure and creditors	Not started
Programme 2: Revenue Management	Review revenue management	Draft and implement revenue enhancement	Finance	July 2017	February 2018	Completed revenue enhancement strategy	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
nt	systems to maximise revenue generation possibilities and improve revenue performance	strategy and plan to improve revenue value chain.					
		Perform complete meter audit of metered services	Finance and Engineering	November 2016	December 2016	Completed meter audit and corrections done on FMS	Completed
		Perform a physical verification of all services and service connection points	Engineering and Building control	January 2017	March 2017	Physical verification of service points.	Not started
		Perform debtor data analysis and cleansing	Finance	February 2017	April 2017	Accurate and verified debtor data	Not started
		Perform a complete indigent verification process	Finance	July 2016	February 2017	Completed and verified indigent register	In process
		On site water demand management and loss control	Engineering	Sept 2016	June 2017	Leak free customer installations – Reduced losses	Not started
		Analyse electricity losses and draft a loss control	Finance & Engineering	July 2016	September 2017	Completed loss control strategy	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		program.					
		Engage in meter replacement program.	Finance & Engineering	February 2017	June 2019	All broken meters replaced	Not started
		Implementation of cost reflective tariff modelling and revision of all miscellaneous charges	Finance	March 2017	July 2019	Cost reflective tariffs for all services	Not started yet
		Reviewing, analysing and performing benchmarking of user tariffs to the industry norm	Finance	January 2017	Continuous	Debtors collection rate of 60% currently	Continuous
		Enforce credit control and debt collection policy	Finance	January 2017	Continuous	Debtors collection rate of 60% currently	Continuous
		Implement appropriate revenue collection systems	Acting CFO	January 2017	Continuous	Improved collection rate	Not started yet
		Accurate calculations and timeous reporting of revenue due and outstanding debtors on a	Acting CFO, Acting BTO Manager	January 2017	Continuous	Improved revenue forecasting	Not started yet

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		monthly basis					
		Appropriate monitoring and oversight of debt collection practices and timely action with regards to debt impairment	Acting CFO, Acting BTO Manager	January 2017	Continuous	Reduced long outstanding debtors	Not started yet
		Allocate sufficient staff/ capacity to proactively drive the revenue management and debt collection functions and policies to intensify revenue collection.	Acting MM, Acting CFO	March 2017	Continuous	Improved revenue management and debt collection	In process
		Perform a provisional Revenue enhancement Assessment	Finance CFO	July 2017	June 2018	Revenue enhancement assessment report	Done
		Draft a and implement revenue enhancement strategy and plan to improve	Finance	July 2018	June 2019	Completed revenue enhancement strategy	Procurement process Started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		revenue value chain					
Programme 3: Customer care services	Enhance levels of customer care, increase responsiveness to consumer billing and other queries.	Improve community access points	Finance Corporate	January 2017	June 2017	Accessible complete service and payment points	In process
		Engage in a customer satisfaction survey	Finance Corporate	July 2017	December 2017	Completed customer survey	Not started
		Implement a customer service call centre	Finance Corporate	November 2017	January 2018	Customer call centre established	Not started
		Set benchmarks for activities relating to complaints	Finance Corporate	November 2016	Continuou s	Benchmark document drafted	In Progress
		Set service level standards for customer responses	Finance Corporate	November 2016	August 2017	Service level agreement with communities concluded	In Progress
Programme 4:	Review cash	Implement cash flow monitoring.	Finance	November 2016	On-going	Short term liability	In Progress

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
Cash Management and liability	and debt management strategies and practices. Review all liabilities current and non-current and devise a strategy to meet obligations in a timely manner in accordance with legislative requirements.					position determined and cash flow requirements set for MTREF	
		Design and implement an effective grant management and monitoring system to ensure that conditional grants are only used for their intended purposes.	Finance	November 2016	May 2017	Attainable cash flow targets set for the MTREF	In process
		Daily management of	Finance	November 2016	On-going	Attainable cash flow	In process

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		cash-flow with weekly reporting.				targets set for the MTREF	
		Perform monthly bank reconciliations.	Finance	November 2016	On-going	Credible bank reconciliations	In process
		Review long-term debt and restructure where economic benefits can be attained.	Finance	November 2016	On-going	Managing creditors to reduce liability	In process
		Set cash flow targets for the MTREF	Finance	November 2016	July 2018	Attainable cash flow targets set for the MTREF	In process
		Review and calculate short term liabilities	Finance	November 2016	February 2017	Short term liability position determined and cash flow requirements set for MTREF	In Progress
		Review and calculate long term liabilities	Finance	November 2016	February 2017	Long term liability position determined and cash flow requirements set for Long	In Progress

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
						term funding requirements	
		Review and disclose all contingent liabilities	Corporate & Legal	June 2017	31 August 2017	Completed contingent liability register	Not started
		Engage with creditors to discuss repayment plans/arrangements	Acting MM and Acting CFO	November 2016	February 2017	Restructured repayment arrangements	In Process
		Draft repayment plans for liabilities and enter into arrangements with creditors	Finance	November 2016	August 2017	Arrangement with all creditors concluded and cash flow requirements determined	On-going
		Monitor that repayments are being made according to the agreed repayment plans.	Finance	November 2016	June 2018	Arrangement with all creditors concluded and cash flow requirements determined	On-going
		Develop standard operating procedure manuals	Finance	April 2017	June 2017	Standard operating procedures developed	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
						and implemented for all finance related activities	
		Review job descriptions on all staff	Finance	February 2017	June 2017	Job descriptions reviewed for all finance staff members	Not started
Programme 5: Financial Controls	Review internal controls and delegations regarding financial management	Draft 2015/2016 Audit Plan (OPCAR)	Finance Western Cape PT	February 2017	March 2017	Audit action plan addressing all audit findings for 2015/2016	Action plan draft in progress
		Implement 2015/2016 Audit Plan (OPCAR)	Finance	April 2017	August 2018	Corrective action implemented for all audit findings of 2015/2016	Not started
		Perform risk assessment and implement a risk management system	Risk Management	May 2017	September 2017	Risk management system implemented	Not started
		Revise and implement internal controls	Finance & Risk Management	February 2017	June 2018	All internal controls reviewed and	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		to mitigate financial risks	ment			implemented	
		Review all policies, budget and non-budget related, and amend where necessary.	All	March 2017	May 2017	Updated Policies	Not started
		Workshop all policies with related staff.	All	May 2017	July 2017	Policies work shopped	Not started
		Review job descriptions.	All	February 2017	July 2017	Update JD's with new Organogram.	Not started
		Review archiving and record keeping.	All	February 2017	July 2017	Ensure safe guarding of documentation.	Not started
		Staffing of Budget and Treasury Office organogram with suitably qualified and experienced staff.	Finance	February 2017	July 2017	Capacitate staff to perform daily tasks relating to the relative departments.	Not started
		Capacitating and skills development of finance department staff.	Finance	February 2017	July 2017	Fully capacitated and trained staff to work independent	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
						from consultants.	
		Implement internal controls to mitigate financial risks	Finance & Risk Management	March 2017	December 2017	All internal controls reviewed and implemented	Not Started
Programme 6: Asset Management	Implementing asset management through an integrated	Review and update Asset Register.	All	April 2017	August 2017	Updated FAR.	Not started
	infrastructure and asset management plan.	Perform assessment of the useful lives of all infrastructure assets by performing a conditional assessment and ensure that a GIS reference exists for all infrastructure assets.	Engineering	April 2017	July 2017	FAR with reviewed useful lives	Not started
		Unbundle the completed infrastructure projects for 2016/2017	Finance	April 2017	July 2017	Unbundled infrastructure transferred from WIP to PPE	Not started
		Establish a	Finance	April	August	Unbundled	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		complete Work-in-Progress (WIP) register.		2017	2017	infrastructure transferred from WIP to PPE	
		Draft review and implement Asset Procedure Manual	All	April 2017	March 2017	Asset procedure manual drafted and implemented in all departments	Not started
		Draft asset maintenance plans for all asset categories	All	April 2017	December 2017	Asset maintenance plans drafted	Not started
		Perform a municipal strategic asset assessment programme.	All	April 2017	July 2017	Assets identified, performance assessed and management programme drafted.	Started with assistance of NT expert
		Update master plans for all infrastructure assets.	All	April 2017	June 2018	Master plans updated for all infrastructure services.	Not started
		Perform a land audit to identify all municipal assets.	All	January 2017	June 2017	Municipal land audit completed	In Process

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
						and register updated	
		Perform performance assessment of all municipal properties.	All	April 2017	June 2018	Asset management strategy and disposal framework drafted	Not started
		Draft a municipal asset management strategy inclusive of a performance and disposal framework.	All	April 2017	June 2017	Asset management strategy and disposal framework drafted	Not started
Programme 7: Supply Chain Management	Implementing asset management through an integrated infrastructure and asset management plan. Review governance practices in the Supply Chain practices and	Review SCM Delegations	CFO	November 2016	January 2017	System of delegations approved	In Process
		Organise training for all Bid Committees	Finance	April 2017	May 2017	Trained Bid committees	Not started
		Implement electronic Contract Management system	All	Jan 2017	June 2017	Electronic contract management system implemented	Not started
		Review Supply chain Management Policy	Finance	November 2016	February 2017	Reviewed policy to ensure that it is in line with	In Process

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
	implement proper controls and risk management practices.	Review Supply Management Chain Structure	Finance	November 2016	February 2017	SCM Regulations. Reviewed functional organisational structure for SCM	In Process
		Workshop all policies with related staff	Finance	March 2017	May 2017	Workshopped policies	In Process
		Develop and centralise online Procurement and Record Management System for all procurement	Finance	November 2016	February 2017	Electronic SCM system implemented	Not started
Programme 8: Institutional stabilisation	Stability in council, fill management vacancies, conduct organisational redesign,	Review the Organisational structure and place staff in accordance with newly approved organogram.	Acting MM	December 2016	May 2017	Right fit approved organogram	In process
	compile all job descriptions and have job evaluations done	Ensure political stability post Local Government Elections	Administrator	August 2016	August 2017	Functional council	In process
		Fill critical	Acting MM	June	September	Key	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		vacancies - Municipal Manager, Chief Financial Officer, HODs and key management staff	and Acting CFO	2017	r 2017	management positions filled	
		Capacitating and development of finance department staff	Finance	June 2017	July 2018	Fully capacitated and trained staff to work independent from consultants	Not started
		Review all HR and organisational policies processes and procedures	Corporate services	June 2017	June 2018	Employee handbook developed containing all HR policies, procedures and processes	Not started
Programme 9: Accounting IT and Data Management	Review IT infrastructure and implement Accounting and Budget Reforms	Review IT infrastructure and develop and implement infrastructure replacement policy	Corporate services	July 2017	July 2019	IT infrastructure replacement policy developed	Not started
		Establish and institutionalise an	All	February 2017	Continuous	IT Steering committee	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
		IT Steering committee.				established and operational	
		Establish mSCOA Steering Committee and implement reforms.	Finance with All	January 2017	June 2018	mSCOA Implemented successfully	In process
		Review all computer hardware and software and implement management reporting system	All	January 2017	June 2017	IT management reporting system implemented	Not started
		Employ Acting CFO	Finance	October 2016	April 2017	To create stability within the department	In Process
Programme 10: Liability Management	Review all liabilities current and non-current and devise a strategy to meet obligations in a timely manner in accordance	Review and calculate short term liabilities	Finance	February 2017	August 2017	Short term liability position determined and cash flow requirements set for MTREF	Not started
		Review and calculate long term liabilities	Finance	February 2017	August 2017	Long term liability position	Not started

Priority Area	Key Deliverable Project	Activities	Responsible Department	Start date (S,M,L)	End date	Outcome	Status
	with legislative requirements.					determined and cash flow requirements set for Long term funding requirements	
		Review and disclose all contingent liabilities	Corporate & Legal	June 2017	August 2017	Completed contingent liability register	Not started
		Engage with creditors to discuss repayment plans/arrangements	Acting MM and Acting CFO	November 2016	August 2017	Restructured repayment arrangements	In Process
		Draft repayment plans for liabilities and enter into arrangements with creditors	Finance	November 2016	August 2017	Arrangement with all creditors concluded and cash flow requirements determined	On-going

TABLE 53: FINANCIAL RECOVER PLAN

Annexure B: Mandatory Limits and Budget Parameters

FUNCTIONAL AREA	ACTIVITY	BUDGET 2016/2017	BUDGET 2017/2018	BUDGET 2018/2019	COMMENTS
Budget Management	Tariff Setting:-				NERSA Guideline
	Electricity	+2%	+2%	+2%	plus 2%
	Water	CPI + 4	CPI + 4	CPI + 4	These are the minimum tariff increases
	Refuse	CPI + 4	CPI + 4	CPI + 4	
	Sanitation	CPI + 4	CPI + 4	CPI + 4	
	Rates	CPI + 4	CPI + 4	CPI + 4	Revenue neutral on implementation of new Valuation Roll plus CPI + 4
	Miscellaneous Tariffs	CPI	CPI	CPI	
	Revenue Collection	95%	95%	95%	% of total expenditure
	Expenditure Targets:				
	Salaries & Wages	34%	33%	32%	
	Maintenance	2% of budget expenditure	4% of budget expenditure	6% of budget expenditure	
	Other Expenditure (Increase)	CPI	CPI	CPI	
	Capital Grants spending	100%	100%	100%	
Asset Management/ Utilisation	Capital Expenditure to Total Expenditure	7% - 10%	10% - 15%	15% - 20%	
	Repairs and Maintenance as a % of total expenditure budget	2.75%	4%	6%	
Debtors Management	Collection Rate	95%	95%	95%	
	Bad debts Written-Off as % of Provision for Bad Debt	100%	100%	100%	
	Net Debtors Days	60 days	55 days	50 days	
Liquidity Management	Cash/ Cost Coverage Ratio (Excl. Unspent	1 – 3 months	1 – 3 months	1 – 3 months	

FUNCTIONAL AREA	ACTIVITY	BUDGET 2016/2017	BUDGET 2017/2018	BUDGET 2018/2019	COMMENTS
	Conditional Grants)				
	Current Ratio	.5 – 1	.8 – :1	1. – 1.25	
Liability Management	Capital Cost (Interest paid and Redemption) as a % of Total Operating Expenditure	3% - 4%	3% - 4%	4% - 5%	
	Debt (Total Borrowings)/Revenue	13%-15%	13% - 15%	15% - 17.5%	
Expenditure Management	Creditors Payment Period (Trade Creditors)	60 days	48 days	30 days	Any valid payment due older than 30 days must have an agreement with supplier as to the terms of payment
	Contracted Services % of Total Operating Expenditure	5% - 6%	4% - 5%	3% - 4%	
Budget Implementation	Capital Expenditure Budget Implementation Indicator	95% - 100%	95% - 100%	95% - 100%	
	Operating Expenditure Budget Implementation Indicator	90% - 95%	95% - 96%	96% - 98%	
	Operating Revenue Budget Implementation Indicator	95% - 98%	98% - 99%	98% - 100%	
	Service Charges and Property Rates Revenue Budget Implementation Indicator	95% - 98%	98% - 99%	98% - 100%	
Distribution Losses	Electricity Distribution Losses (Percentage)	7% - 10%	6% - 10%	6% - 9%	
	Water Distribution Losses (Percentage)	10% - 15%	10% - 12.5%	8% - 12%	
Sustainability	Level of Cash Backed	5%	5%	10%	

FUNCTIONAL AREA	ACTIVITY	BUDGET 2016/2017	BUDGET 2017/2018	BUDGET 2018/2019	COMMENTS
	Reserves (Capital Replacement)				

Annexure C: Costing the Recovery Plan

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
Programme 1: Budgeting and Expenditure Management	Review budgeting process, principles and strategy as well as expenditure management systems to ensure efficient and effective service delivery in line with Kannaland Municipality priorities.	Prepare and implement 2016/17 Adjustment Budget	147,000.00	Provincial Financial Management assistance
		Prepare and table the 2017/18 MTREF Budget	88,200.00	Provincial Financial Management assistance
		Developing long-term Financial Plan to inform budget and financial operational planning	400,000.00	Provincial Financial Management assistance
		Institutionalise pre-determined creditors payment dates and implement expenditure and creditors management.	0.00	Internal
Programme 2: Revenue Management	Review revenue management systems to maximise revenue generation possibilities and improve revenue performance	Draft and implement revenue enhancement strategy and plan to improve revenue value chain.	0.00	Internal
		Perform complete meter audit of metered services.	0.00	Internal
		Perform a physical verification of all services and service connection points.	0.00	Internal

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
		Perform debtor data analysis and cleansing	0.00	Internal
		Perform a complete indigent verification process	0.00	Internal
		On site water demand management and loss control	0.00	Internal
		Analyse electricity losses and draft a loss control programme	0.00	Internal
		Engage in meter replacement programme	200,000.00	Provincial Management support (PT & DLG)
		Implementation of cost reflective tariff modelling and revision of all miscellaneous charges	0.00	Internal
		Reviewing, analysing and performing benchmarking of user tariffs to the industry norm	0.00	Internal
		Enforce credit control and debt collection policy	0.00	Internal
		Implement appropriate revenue collection systems	0.00	Internal
		Accurate calculations and timeous reporting of revenue due and outstanding debtors on a monthly basis	0.00	Internal
		Appropriate monitoring and oversight of debt collection	0.00	Internal

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
		practices and timely action with regards to debt impairment		
		Allocate sufficient staff/capacity to proactively drive the revenue management and debt collection functions and policies to intensify revenue collection.	0.00	Internal
		Perform a provisional Revenue enhancement Assessment.	0.00	Internal
		Execute revenue enhancement programme.	500,000.00	Provincial Management support (PT & DLG)
Programme 3: Customer care services	Enhance levels of customer care, increase responsiveness to consumer billing and other queries	Improve community access points	0.00	Internal
		Engage in a customer satisfaction survey	0.00	Internal
		Implement a customer service call centre	0.00	Internal
		Set benchmarks for activities relating to complaints	0.00	Internal
		Set service level standards for customer responses	0.00	Internal
Programme 4: Cash Management and liability	Review cash and debt management strategies and practices.	Implement cash flow monitoring	0.00	Internal
		Design and implement an effective grant management and monitoring system to	0.00	Internal

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
	Review all liabilities current and non-current and devise a strategy to meet obligations in a timely manner in accordance with legislative requirements.	ensure that conditional grants are only used for their intended purposes.		
		Daily management of cash-flow with weekly reporting.	0.00	Internal
		Perform monthly bank reconciliations.	0.00	Internal
		Review long-term debt and restructure where economic benefits can be attained.	0.00	Internal
		Set cash flow targets for the MTREF	0.00	Internal
		Review and calculate short term liabilities	0.00	Internal
		Review and calculate long term liabilities	0.00	Internal
		Review and disclose all contingent liabilities	0.00	Internal
		Engage with creditors to discuss repayment plans/arrangements	0.00	Internal
		Draft repayment plans for liabilities and enter into arrangements with creditors	0.00	Internal
		Monitor that repayments are being made according to the agreed repayment plans.	0.00	Internal
		Develop standard operating procedure manuals	0.00	Internal

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
		Review job descriptions on all staff	0.00	Internal
Programme 5: Financial Controls	Review internal controls and delegations regarding financial management	Draft 2015/2016 Audit Plan (OPCAR)	0.00	Internal & WCPT
		Implement 2015/2016 Audit Plan (OPCAR)	1,157,200.00	Provincial Management support (PT & DLG)
		Perform risk assessment and implement a risk management system	475,000.00	Provincial Management support (PT & DLG)
		Revise and implement internal controls to mitigate financial risks	0.00	Internal
		Review all policies, budget and non-budget related, and amend where necessary	117,600.00	Provincial Management support (PT & DLG)
		Workshop all policies with related staff	29,400.00	Provincial Management support (PT & DLG)
		Review job descriptions on all staff	0.00	Internal
		Review archiving and record keeping	0.00	Internal
		Staffing of Budget and Treasury Office organogram with suitably qualified and experienced staff.	0.00	Internal
		Capacitating and skills development of finance department staff.	0.00	Internal
		Implement internal controls to mitigate financial risks	125,000.00	Provincial Management support (PT & DLG)

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
Programme 6: Asset Management	Implementing asset management through an integrated infrastructure and asset management plan.	Review and update Asset Register	85,500.00	Provincial Management support (PT & DLG)
		Perform assessment of the useful life of all infrastructure assets and GPS reference	73,740.00	Provincial Management support (PT & DLG)
		Unbundle infrastructure for 2016/2017	99,960.00	Provincial Management support (PT & DLG)
		Establish a complete Work-in-Progress (WIP) register.	82,320.00	Provincial Management support (PT & DLG)
		Draft review and implement Asset Procedure Manual	41,160	Provincial Management support (PT & DLG)
		Draft asset maintenance plans for all asset categories	41,160	Provincial Management support (PT & DLG)
		Perform a municipal strategic asset assessment programme	0.00	Internal
		Update master plans for all infrastructure assets	0.00	Internal
		Perform a land audit to identify all municipal assets.	0.00	Internal
		Perform performance assessment of all municipal properties.	0.00	Internal
		Draft a municipal asset management strategy inclusive of a performance and disposal framework	41,160	Internal
Programme 7:	Review governance	Review SCM Delegations	0.00	Internal
		Organise training for all Bid	23,520.00	Provincial Management support (PT & DLG)

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
Supply Chain Management	practices in the Supply Chain practices and implement proper controls and risk management practices.	Committees		DLG)
		Implement electronic Contract Management system	0.00	Internal
		Review Supply chain Management Policy	0.00	Internal
		Review Supply Chain Management Structure	0.00	Internal
		Workshop all policies with related staff	29,400.00	Provincial Management support (PT & DLG)
		Develop and centralise online Procurement and Record Management System for all procurement	0.00	Internal
Programme 8: Institutional stabilisation	Stability in council, fill management vacancies,	Review the Organisational structure and place staff in accordance with newly approved organogram.	372,000.00	Internal
	conduct organisational redesign,	Ensure political stability post Local Government Elections	0.00	Internal
	compile all job descriptions and have job evaluations done	Fill critical vacancies - Municipal Manager, Chief Financial Officer, HODs and key management staff	0.00	Internal
		Capacitating and development of finance department staff	0.00	Internal
		Review all HR and organisational policies processes and procedures	290,000.00	Provincial Management support (PT & DLG)

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
Programme 9: Accounting IT and Data Management	Review IT infrastructure and implement Accounting and Budget Reforms	Review IT infrastructure and develop and implement infrastructure replacement policy	3,500,000.00	Internal
		Establish and institutionalise an IT Steering committee	0.00	Internal
		Establish mSCOA Steering Committee and implement reforms	2,500,000.00	Provincial Management support (PT & DLG)
		Review all computer hardware and software and implement management reporting system	0.00	Internal
		Employ Acting CFO	435,000.00	Provincial Management support (PT & DLG)
Programme 10: Liability Management	Review all liabilities current and non-current and devise a strategy to meet obligations in a timely manner in accordance with legislative requirements.	Review and calculate short term liabilities – Creditors system	255,400.00	Provincial Management support (PT & DLG)
		Review and calculate long term liabilities – Creditors system	28,000.00	Provincial Management support (PT & DLG)
		Review and disclose all contingent liabilities	0.00	Internal
		Engage with creditors to discuss repayment plans/arrangements	0.00	Internal
		Draft repayment plans for liabilities and enter into arrangements with	0.00	Internal

Priority Area	Key Deliverable Project	Activities	Cost Estimate	Proposed Funding Source
		creditors		

TABLE 54: RECOVERY PLAN COSTING

ANNEXURE D: SUMMARY OF COST

Description	Cost Estimate (R)
Programme 1 - Expenditure Management	635,200.00
Programme 2 - Revenue Management	700,000.00
Programme 3 – Customer Care	0.00
Programme 4 - Cash Management and Liability	0.00
Programme 5 - Financial Controls	1,904,200.00
Programme 6 - Asset management	391,260.00
Programme 7 - Supply Chain Management	52,920.00
Programme 8 - Institutional stabilisation	662,000.00
Programme 9 - Accounting, IT and Data Management	6,435,000.00
Programme 10 - Liability management	283,400.00
Total cost to fund the financial recovery plan	11,063,980.00

TABLE 55: COSTING SUMMARY

ANNEXURE E:	IDP & BUDGET PROCESS PLAN
ANNEXURE F:	SPATIAL DEVELOPMENT FRAMEWORK
ANNEXURE G:	DISASTER MANAGEMENT PLAN
ANNEXURE H:	HUMAN SETTLEMENT PLAN
ANNEXURE I:	SOCIO ECONOMIC PROFILE OF KANNALAND

IDP / BUDGET PROCESS PLAN 2017/2018

Kannaland Municipality

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LIST OF ABBREVIATIONS

BSC	Budget Steering Committee
CFO	Chief Financial Officer
HOD	Head of Department
IDP	Integrated Development Plan
MBRR	Municipal Budget and Reporting Regulations
MFMA	Municipal Finance Management Act
MPPMR	Municipal Planning and Performance Management Regulations
MSA	Municipal Systems Act
NT	National Treasury
PAC	Performance Audit Committee
PPU	Public Participation Unit
PT	Provincial Treasury

1. Introduction

The vision and mission of Kannaland Municipality is mainly focused on retaining the human resources of the municipality by exploiting the local attributes of the municipality.

The vision and mission of the Municipality are as follows:

Vision: “To be the place of Choice”

Mission:

- Encouraging self-reliance.
- Ensure co-ordination and collaboration of various stakeholders in the delivering of development in a sustainable manner.
- Promote a healthy and vibrant community with high moral standards.
- Unlock the development potential of the area particularly tourism and indigenous knowledge and mobilizing investment.
- Ensure everyone will be active in the economy and utilize technology to the advantage of the municipality.
- Attract and keep a highly skilled work force.

The Integrated Development Plan is the municipality’s principal strategic planning document. It is imperative to note that the IDP ensures close co-ordination, alignment and integration between priorities, projects, programs and activities, both internally between directorates and externally between stakeholders and other spheres of government. The IDP therefore ultimately enhances integrated service delivery and development and promotes sustainable integrated communities.

This process plan briefly outlines the activities in the processes which the municipality will undertake in drafting its 2016/17 IDP Review and Budget. It furthermore substantiates the need for increased citizen involvement through municipal driven structures such as Ward Communities and various representative forums.

It is important to bear in mind that the end result of the IDP process is not the drafting of the IDP document, but the actual implementation of projects which will ultimately improve the conditions in which the residents of Kannaland live.

2. Legal framework: IDP AND BUDGET PROCESS PLAN

According to Section 28(1) of the Municipal System Act, No 32 of 2000 a municipal council must adopt a process set out in writing to guide the planning, drafting and review of its integrated development plan. This Process Plan outlines the programme to be followed and provides detail on the issues specified in the Act. A process plan must include the following:

- *A programme specifying time-frames for the different steps;*
- *Outline mechanisms, processes and procedures for consultation of the community, organs of state, traditional authorities and role-players;*
- *Identify all plans and planning requirements binding on the municipality;*
- *Be consistent with any other matters prescribed by legislation.*

Section 21(1) of the Municipal Finance Management Act (Act 56 of 2003) further prescribes that the Mayor of a municipality must co-ordinate the processes of preparing the annual budget and for reviewing the municipality's IDP. It is therefore imperative that a time schedule outlining the key activities in the process with deadlines for attainment be tabled to Council for approval ten (10) months prior to the final approval of the IDP and Budget.

In order to ensure certain minimum quality standards of the IDP process and a proper coordination between and within the spheres of government, the preparation of the planning process is regulated by the Municipal Systems Act, No 32 of 2000. Section 28 of the Systems Act stipulates that;

- *Each Municipal Council must adopt a process set out in writing to guide the planning, drafting, adoption and review of the IDP.*
- *The municipality must through appropriate mechanisms, processes and procedures established in terms of Chapter 4, consult the local community before adopting the process.*
- *A municipality must give notice to the local community of particulars of the process it intends to follow.*

In terms of Section 29(1) of the Municipal Systems Act the process must;

- *be in accordance with a predetermined programme specifying timeframes for the different steps;*
- *through appropriate mechanisms, processes and procedures allow for the local community to be consulted on its development needs and priorities, allow the local community to participate in the drafting of the IDP, and allow organs of state, including traditional authorities, and other role players to be identified and consulted on the drafting of the IDP;*
- *provide for the identification of all plans and planning requirements binding on the municipality in terms of national and provincial legislation.*

3. PURPOSE OF THE IDP AND BUDGET PROCESS PLAN

The purpose of the process plan is to indicate the various planned activities and strategies on which the municipality will embark to compose its integrated development plan and the budget for the 2017/18. financial year as well the two outer years.

The process plan enhances integration and alignment between the IDP and Budget, thereby ensuring the development of an IDP-based budget. It fulfills the role of a business plan or an operational framework for the IDP process outlining the manner in which the IDP process will be undertaken. In addition, it identifies the activities in the processes around the key statutory annual operational processes of the budget and IDP compilation, performance management implementation and the adoption of the municipality's annual report.

The IDP and Budget processes are two distinct but integrally linked processes which must be coordinated to ensure that the IDP and budget related policies and the final budget are mutually consistent and credible. Credibility refers to the municipality's ability and capacity to spend and deliver services in accordance with its approved budget. The process creates its own dynamics since it encompasses the involvement of external role-players and vested interest groups, therefore it requires accurate logistical planning and arrangements of engagement sessions to ensure that the process is implemented in accordance with the approved schedule.

4. MEDIUMS / METHODS OF COMMUNICATION

The following mechanisms can be used to inform and communicate to stakeholders at any point in time during the process:

METHOD	REASON
Newspaper Publication	To invite comments from the public for both draft and final IDP documents. To ensure the municipality adheres to legislation in terms of published the notices in the local newspapers.
Loud Hailing	To alert the community on the IDP process as well to ensure the message is carried out within the community to attend the public participation meetings in order to identify needs.
Ward Committee Meetings and Public Participation Meetings	Ward committees serves as an official specialised participatory structure within the municipality and a mobilizing agent for community action within the wards. Ensure constructive and harmonious interaction between the municipality and community through the use and co-ordination of ward residents meetings and other community development forums.
Community newsletters	To inform the public of the IDP processes
Website	To adhere to legislation in terms of section 21 of the Municipal Systems Act as well to make the IDP and all other related documents public on the municipal website.

5. ROLES AND RESPONSIBILITIES

One of the prerequisites of a well-organized IDP process is for all role players to be fully aware of their own as well as other role player's responsibilities. The Table below outlines a brief description thereof.

Roles and Responsibilities within the Municipality

ROLE PLAYERS	ROLES AND RESPONSIBILITIES
Council	❖ Approve and adopt the process and framework plans as well as IDP and budget ❖ Monitor the implementation and approve any amendments of the plan when necessary.
Executive Mayor and Mayoral Committee	❖ Consider the IDP and Budget timetable and Process Plan and submit to Council for approval. ❖ Overall management, coordination and monitoring of the IDP process. ❖ Assign and delegate responsibilities in this regard to the Municipal Manager. ❖ Submit the draft IDP to Council for approval. ❖ Submit final IDP and Budget to Council for adoption. ❖ Provide political guidance in IDP and Budget (in terms of section 53(a) of the MFMA Act 56 of 2003. ❖ Co-ordinate plans and Timetables for the Budget. ❖ Exercise close oversight on Budget Preparation Process.
Speaker	❖ Overall monitoring of the public participation process. ❖ Exercise oversight of the ward committee system.
Ward Councillors / Ward Committees	❖ Form a link between the Municipality and residents. ❖ Link the IDP process to their respective Wards. ❖ Assist in the organising of public consultation and participation. ❖ Monitor the implementation of the IDP with respect to their particular wards ❖ Encourage residents to take part in the IDP process.
Municipal Manager	❖ Managing and coordinate the entire IDP process as assigned by the Executive Mayor. ❖ Fulfil the duties of Accounting Officer as set out in Sections 68 and 69 of the MFMA, Act 56 of 2003.
IDP Co-ordinator	❖ Prepare IDP process plan and monitor the timeously implementation

ROLE PLAYERS	ROLES AND RESPONSIBILITIES
	thereof. ❖ Day to day management and coordination of the IDP process. ❖ Ensure stakeholder engagement in IDP process by organising and setting up meetings for engagement. ❖ Ensure that the IDP process is participatory and that planning is ward-based oriented. ❖ Respond to public and MEC comments on Draft IDP. ❖ Compilation of comprehensive, neat and presentable IDP document that complies with all legislative requirements. ❖ Amend the IDP document in accordance with the comments of the ME
	❖ Assist the Speaker to coordinate the process of establishing ward committees. ❖ Responsible for logistical arrangements pertaining to ward committee meetings. ❖ The responsibility to meet regularly with the ward committees to ensure appropriate communication with the communities through the ward committee structure. ❖ The responsibility to ensure that representations made through the ward committees and ward councillors are channelled to the appropriate structures/functionaries for further attention/information. ❖ To provide the administrative support to ward committees. ❖ Coordinate the review of the IDP
Executive Managers and Head of Departments	❖ Provide relevant technical, sector and financial information for analysis for determining priority issues. ❖ Provide technical expertise in consideration and finalisation of strategies and identification of projects. ❖ Provide departmental, operational and capital budgetary information. ❖ Preparation of project proposals, integration of projects and sector programmes. ❖ Give input during the IDP review process
IDP-Steering Committee	❖ Refinement and Quality check of IDP document to ensure compliance with legislation. ❖ Consist of Municipal Manager, Senior Management, IDP Co-ordinator, Speaker. ❖ Provide an organisational mechanism for discussion, negotiation and decision making between stakeholders. ❖ Represents the interest of their functions in the IDP process. ❖ Monitors the performance of the planning and implementation process and update of the performance system ❖ Comprises of the Mayor, Councillors, Ward Committees, Municipal Manager, Directors, representatives of various sectors, NGO's,

ROLE PLAYERS	ROLES AND RESPONSIBILITIES
	Government Departments and specialised community members.
Budget-Steering Committee (GRAP)	❖ To provide technical assistance to the mayor in discharging the responsibilities set out in Section 53 of the MFMA. ❖ Consist of portfolio Councillor for Financial matters, the Municipal Manager, the Chief Financial Officer, Senior Managers and Head of Departments to give technical advice if necessary.
MPAC	❖ Review the IDP and give recommendation to the MAYCO and Council

5.2 Distribution of roles and responsibilities between the municipality and external role players

It is one of the pre-requisitions of a smooth and well organised IDP process that all role players are fully aware of their own and of other role players' responsibilities. Therefore, it is one of the first preparation requirements for the IDP process to ensure that there is a clear understanding of all required roles and of the persons or organisations that can assume those roles.

This section deals with the roles which the municipality has to play in the IDP process in relation to the roles which external role players are expected to play.

ROLE PLAYERS	ROLES AND RESPONSIBILITIES
Kannaland Municipality	❖ Prepare and adopt the IDP. ❖ Undertake the overall planning, management and coordination of the IDP process. ❖ Consider comments of the MEC on the IDP and adjust the IDP if necessary. ❖ Ensure linkage between the Budget and IDP.
Local Residents, Communities and Stakeholders	❖ Represents interest and contributes knowledge and ideas in the IDP process by participating in and through the ward committees. ❖ Keep communities informed on IDP activities and outcomes.
Eden District Municipality	❖ Ensure alignment of the IDP between the municipality and the district municipality (Integrated District and Local Planning). ❖ Preparation of joint strategy workshops between municipality, provincial

ROLE PLAYERS	ROLES AND RESPONSIBILITIES
	and national government.
Provincial Government	❖ Ensure horizontal alignment of the IDP between the municipality and the District municipality. ❖ Ensuring vertical and sector alignment between provincial sector departments/ provincial strategic plans and the IDP process at local/district level. ❖ Efficient financial management of Provincial IDP grants. ❖ Monitor the IDP progress. ❖ Assist municipalities in compiling the IDP. ❖ Coordinate and manage the MEC's assessment of the IDP. ❖ Provincial Treasury must provide views and comments on the draft budget and any budget-related policies and documentation for consideration by council when tabling the budget. ❖ Conduct Medium Term Revenue and Expenditure Framework (MTREF) budget and IDP assessment.
Sector Departments	❖ Contribute sector expertise and knowledge. ❖ Provide sector plans and programmes for inclusion in the IDP.
National Government	❖ National Treasury issues guidelines on the manner in which municipal councils should process their annual budgets, including guidelines on the formation of a committee of the council to consider the budget (Section 23(3) of the MFMA).

6. REPORTING REQUIREMENTS

Legislation requirements on reporting is summarised in the below table:

Frequency	MSA/ MFMA Reporting on PMS	Section
Quarterly reporting	The municipal manager collates the information and draft the organizational performance report, which is submitted to Internal Audit. The Internal Auditors (IA) must submit quarterly audited reports to the Municipal Manager and to the Performance Audit Committee The Municipal Manager submits the reports to the Council.	MSA Regulation14(1)(c)

Frequency	MSA/ MFMA Reporting on PMS	Section
Mid-year Reporting	The Performance Audit Committee must review the PMS and make recommendations to council	MSA Regulation14(4)(a)
	The Performance Audit Committee must submit a report at least twice during the year are port to Council	MSA Regulation14(4)(a)
	The Municipality must report to Council at least twice a year	
	The Accounting officer must by 25 January of each year assess the performance of the municipality and submit a report to the Mayor, National Treasury and the relevant Provincial Treasury.	MFMA S72
Annual reporting	The annual report of a municipality must include the annual performance report and any recommendations of the municipality's audit committee	MFMA S121(3)(c)(j) &MSA S46
	The accounting officer of a municipality must submit the performance report to the Auditor-General for auditing within two months after the end of the financial year to which that report relate	MFMA S126 1(a)
	The Auditor-General must audit the performance report and submit the report to the accounting officer within three months of receipt of the performance report	MFMA S126(3)(a)(b)
	The Mayor of a municipality must, within seven months after the end of a financial year, table in the municipal council the annual report of the municipality	MFMA S127(2)
	The Auditor-General may submit the performance report and audit report of a municipality directly to the municipal council, the National Treasury, the relevant provincial treasury, the MEC responsible for local government in the province and any prescribed organ of the state	MFMA S127(4)(a)
	Immediately after an annual report is tabled in the council, the accounting officer of the municipality must submit the annual report to the Auditor- General, the relevant provincial treasury and the provincial department responsible for local government in the province.	MFMA S127(5)(b)

Frequency	MSA/ MFMA Reporting on PMS	Section
	The council of the municipality must consider the annual report by no later than two months from the date on which the annual report was tabled, adopt an oversight report containing council's comments on the annual report	MFMA S129(1)
	The meetings of a municipal council at which an annual report is to be discussed or at which decisions concerning an annual report are to be taken, must be open to the public and any organ of the state	MFMA S130(1)
	The Cabinet member responsible for local government must annually report to Parliament on actions taken by the MECs for local government to address issues raised by the Auditor-General	MFMA S134

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Preparation	Conduct an assessment of progress of the performance measurements and changing circumstances in the municipality to constitute a review of the IDP	Executive Mayor Municipal Manager		04										
	Tabling of the draft IDP Review & Budget Time Schedule to the MAYCO meeting: • Tabling of draft IDP & Budget Time Schedule to Council	Executive Mayor Council		31										
	District IDP Managers Forum – Alignment of IDP Review & Budget Time Schedule with District Framework Plan	Eden District IDP Manager												
Analysis	Review of the Performance Management System (PMS)	Performance and Compliance Officer	31											
	Review the annual performance against SDBIP's	Performance and Compliance Officer		30										
	Assess the municipal financial position and capacity (based on the Annual Financial Statements of previous budget year)	Chief Financial Officer		25										
	Review budget-related policies and set policy priorities for next 3 financial years	Chief Financial Officer	31											
	Determine the funding/revenue potentially available for next 3 years	Chief Financial Officer				10								

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
	Determine the likely financial outlook and identify changes to fiscal strategies	Chief Financial Officer					28							
	Refine funding policies; review tariff structures	Chief Financial Officer												29
	Evaluation of matters identified in IDP Assessment Report received from MEC: Local Government	IDP Coordinator									29			
	Determine any changes in the Socio-economic conditions & trends of Kannaland Municipality	Senior Management		27										
Consultation	Advertising a schedule of public meetings per ward	IDP Coordinator				17				15				
	Embarking on a public participation process via public meetings per ward to:	Executive Mayor								15		25		
	Councillors													
	- Provide feedback on progress of ward priorities - Presentation of IDP Review & Budget time schedule - Obtain input on community needs for the IDP Review process	Senior Management												
Strategy	Strategic Planning Session to conduct a mid-term review:	Executive mayor						04	15					

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS				JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	- Council's Strategic Objectives - Assessment of the performance of implementation of Council's 5yr strategic plan (2012-2017 IDP)	Senior Managers													
	Prioritisation of development objectives, projects & programmes by Ward Committees: Facilitate a more inclusive consultation process for the prioritisation of ward projects/programmes	Ward Councillors Ward Committees IDP Coordinator Communication Officer			15	19				28		25			
	IDP Indaba 1 engagement Alignment of Strategic objectives of the municipality with that of the provincial and national government departments	Municipal Manager IDP Coordinator			15										
	District IDP Managers Forum Meeting	Eden District IDP Coordinator								23					
	Provincial IDP Managers Forum Meeting	Provincial Dept. of Local Government IDP Coordinator				15									

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
	IDP INDABA 2 engagement:	Provincial Dept. of Local Government								26				
	- Identify projects & programmes which might need support/financial assistance from Government - Referring of community issues which have been identified during IDP process but are not competencies of Local Government to the relevant National & Provincial Sector Departments	IDP Coordinator												
	Follow up on IDP Indaba agreements													
	Identification of new Capex/Opex projects & programmes culminating from the IDP Review Process	All departments								15		25		
	Prioritisation of internal & external Capex & Opex projects & Programmes	IDP & Budget Steering Committee										25		
	Workshop for the preparation of Adjustment Budget	Chief Financial Officer							22					
	Tabling & approval of Adjustment Budget	Chief Financial Officer								28				
	(to be approved before 28 Feb)													

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS				JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
	Workshop with Council to finalize:	Executive Mayor									23				
	- Draft IDP Review - Draft Operational & Capital Budget	Senior Management													
Integration	Quarterly meetings of IDP & Budget Steering Committee	Executive Mayor				23			22		12	25			
		CFO													
		IDP Coordinator													
		Municipal Manager													
	Preparation of draft IDP Review document	IDP Coordinator							15						
	Circulation of draft IDP Review document to all directorates for their input & comment	IDP Coordinator									25				
	Tabling of draft IDP Review & Budget to MAYCO	Municipal Manager									31				
		CFO													
	Tabling of draft IDP Review & Budget to Council	Executive Mayor Council									31				
	Submission of tabled draft IDP Review & Budget to the MEC: Local Government, National & Provincial Treasury (Within 10 working days after tabling)	IDP Coordinator										04			
		CFO													

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Consultation	Publishing of draft IDP Review & Budget (including proposed tariffs) for perusal and public comment	IDP Coordinator CFO										04		
	Embarking on a public participation process via public meetings per ward to obtain final input from stakeholders on the tabled draft IDP & Budget	Executive Mayor Councillors Senior Management										25		
	LGMTEC 3 engagement with Provincial & National Sector Departments to obtain input on the draft IDP Review & Budget	Provincial Department of Local Government										22		
	Incorporate notes and comment from MEC: Local Government & Provincial Treasury and DEA&DP on draft IDP Review & Budget	IDP Manager CFO										26		
Approval	Consideration of all submissions made by community subsequent to the public participation process of the draft IDP Review & Budget	IDP Manager CFO											16	
	MAYCO meeting to consider the submissions and, if necessary, to adjust the draft IDP and Budget	Municipal Manager											21	
	Council workshop on draft IDP Review & Budget prior to	CFO											22	

KANNALAND MUNICIPALITY IDP REVIEW AND BUDGET PROCESS			JULY 2017 – JUNE 2018											
Phase	Activity	Responsible person	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
	adoption	IDP Manager												
	Council meeting to adopt the final IDP Review & Annual Budget and the Performance Management measures and targets	Executive Mayor Municipal Manager Council											27	
	(At least 30 days before the start of the budget year)													
	Management workshop to finalize the SDBIP's	Performance and Compliance Officer											02	
	Publish the adopted IDP Review & Budget with all budget related documents and policies on the municipal website	IDP Coordinator CFO											04	
	Submit a copy of the adopted IDP Review & Budget to the MEC: Local Government and Treasury (Within 10 working days after adoption)	IDP Coordinator CFO											04	
Finalization	Advertise a public notice of the adoption of the IDP	IDP Coordinator											04	
	Publish a summary of the IDP and Budget on municipal website	IDP Coordinator											04	
	Approval of the Service Delivery & Budget Implementation Plan (SDBIP) (within 28 days of approval of budget)	Executive Mayor												25

PROPOSED DATES FOR IDP PUBLIC ENGAGEMENTS: 2017/18 IDP REVIEW AND BUDGET CYCLE

Date	Day	Time	Ward	Venue	Ward Councillor
DRAFT IDP / BUDGET					
October			1	Community Hall	Councillor Donson
				Ward Meeting	
October			2	Community Hall	Councillor Meshoa
				Ward meeting	
October			3	Sport Club Hall	Ald Barry
				Ward Meeting	
October			4	Town Hall	Speaker Theron
				Ward Meeting	
FINAL IDP / BUDGET					
April			1	Community Hall	Councillor Donson
				Ward Meeting	
April			2	Community Hall	Councillor Meshoa
				Ward meeting	
April			3	Sport Club Hall	Ald Barry
				Ward Meeting	
April			4	Town Hall	Speaker Theron
				Ward Meeting	

SIGNED BY:

EXECUTIVE MAYOR:

MUNICIPAL MANAGER:

DATE:

DISASTER MANAGEMENT PLAN

2014-05-20

LE&R NR: 17/10/B

VERSLAG DEUR: (MUNISIPALE BESTUURDER : M.M. HOOGBAARD)

INLEIDING

Om die Burgemeesterskomitee in te lig dat die "Disaster Management Plan" hersien is, en goedkeuring te verkry vir die "Disaster Management Plan".

AGTERGROND

Die "Disaster Management Act" vereis dat Plaaslike Owerhede 'n "Disaster Management Plan" moet saamstel.

WETGEWING

- Disaster Management Act (Act 57 of 2002)

FINANSIËLE IMPLIKASIES

- Geen, op hierdie stadium.

ROLSPELERS

- Raad
- Eden Distriksmunisipaliteit
- Bestuur
- Gemeenskap

AANBEVELING

1. DAT die Burgemeesterskomitee die "Disaster Management Plan" goedkeur.

**UITTREKSEL UIT NOTULE VAN VAN BURGEMEESTERSKOMITEE VAN
KANNALAND MUNISIPALITEIT SOOS GEHOUD OP
WOENSDAG, 24 MEI 2014 IN DIE BIBLIOTHEEKSAAL TE LADISMITH.**

MAYCO 13/05/14 : DISASTER MANAGEMENT PLAN

BESLUIT

1. **Dat** die Burgemeesterskomitee die “Disaster Management Plan” goedkeur.



KANNALAND LOCAL MUNICIPALITY

DISASTER RISK ASSESSMENT

FINAL DRAFT REPORT

2016



This report aims to help make disaster risk reduction and assessment a routine part of development planning and resource allocation in the Kannaland Local Municipality. This means implementing targeted interventions and instilling a culture of applying disaster risk assessment as an analytical and decision-making framework at all government levels and across society.

This Disaster Risk Assessment needs to be continuously reviewed and updated to provide a comprehensive picture of Kannaland Local Municipality's risk profile and to ensure a focused-driven multi-stakeholder approach.

GLOSSARY OF KEY TERMS

The following concepts are discussed in this report:

TERM	DEFINITION
Aircraft incident	An aircraft incident is an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which a person is fatally or seriously injured, the aircraft sustains damage or structural failure or the aircraft is missing or is completely inaccessible ⁱ .
Air pollution	Any substance that people introduce into the atmosphere that has damaging effects on living things and the environment is considered air pollution. Air pollution occurs when the air contains gases, dust, fumes or odours in amounts that are harmful. That is, amounts which could be harmful to the health or comfort of humans and animals or which could cause damage to plants and materials. The substances that cause air pollution are called pollutants ⁱⁱ .
Alien invasive species	Alien species are those species that have been relocated outside of their normal distribution ranges. A relatively small number of these become invasive – displaying the ability to reproduce and spread in their new environment, often dominating vegetation and water bodies or displacing native species. South Africa's Biodiversity Act (Act No. 10 of 2004) defines alien species as a species that is not an indigenous species that has translocated to a place outside its natural distribution range in nature ⁱⁱⁱ .
Animal diseases	An animal disease is the impairment of the normal state of an animal that interrupts or modifies its vital functions, affecting a disproportionately large number of animals ^{iv} . Some diseases infect and are spread by animals only and other diseases, known as zoonosis, can be transferred from animals to humans and result in impairment of human life and/or death.
Biodiversity	Biodiversity is the full variety of the genetic wealth within each species and the interrelationships between species in ecosystems. With a land area of 1,2 million km ² South Africa represents 1.24% of the Earth's surface and contains almost 10% of the world's known bird, fish and plant species, and over 6% of mammal and reptile species ^v .
Capacity	The combination of all strengths, attributes and resources available within a community, society or organisation that can be used to achieve agreed goals.
Civil unrest (social conflict)	Civil unrest are various types of negative social interaction that may occur within social relationships (e.g., arguments, criticism, hostility, unwanted demands), and may include physical violence.^{vi} It can be seen as conflict arising between the “haves” and the “have nots” of a society e.g. when a labour union argues with management over worker compensation. The causes of conflict in South Africa are normally related to the following situations: • Labour disputes/Industrial actions; • Dissatisfaction with service delivery (Health, Education, Housing and Municipal Services); and • Xenophobia (unreasonable fear, distrust, or hatred of strangers, foreigners, or anything perceived as foreign or different).
Climate change	A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is, in addition to natural climate variability, observed over comparable time periods ^{vii} .
Coastal erosion	Coastal erosion is a natural process and is the removal of beach or dune sediment, or the weathering of rocks by wave action and currents, tidal currents or drainage. Coastal erosion is expected to continue as the sea level rises and storm frequency and severity increases ^{viii} .
Cold front	A cold front or cold snap can be defined as a rapid decrease in the temperature within a 24 hour period requiring substantially increased protection to agriculture, industry, commerce and social activities in the community. A cold front represents

the leading part of the advancing mass of cold air circulating around the mid-latitude cyclone where it pushes up the warmer air ahead of the cold front, causing heavy cloud cover and rainfall. This means that all stormy weather, such as violent winds, heavy rain, and even lightning and hail, is usually the result of a localised low-pressure area^{ix}.

Contingency planning	A management process that analyses specific potential events or emerging situations that may threaten society or the environment. Contingency planning establishes arrangements to enable timely, effective and appropriate responses to such events and situations.
Critical infrastructure disruption	Critical infrastructure is a term used by governments to describe assets that are essential for the functioning of a society and economy. These assets include electricity generation, telecommunication systems, financial services, and agriculture and public health establishments. Disruption of critical services or supply systems such as Electricity, Water, Health, Sewerage, Stormwater, Transport, Telecommunications, Information Technology, Governmental Administration and certain commercial infrastructure can have a significant effect on the day-to-day lives of a community ^x . Community participation in the form of situational awareness for each of these services and systems, the appropriate risk reduction and contingency initiatives would greatly assist the relevant critical services in their aim of continued service delivery in the Kannaland LM.
Cut-off low pressure systems	Cut-off low pressure systems are unstable atmospheric systems that spin off from frontal systems, and spins off independently. Because it is no longer attached to the westerly pressure wave to the south, it loses all momentum and can just sit for days, or move very slowly before dissipating mountainous areas and violent winds. Generally it occurs in autumn and spring months. These may cause extreme rainfall events and flooding ^{xi} .
Dam failure	A dam is a barrier across flowing water that obstructs, directs or slows down water, often creating a reservoir, lake or impoundment. The term 'dam' here includes any catchment or barrier dam and any other form of impoundment used for the storage of unpolluted water or water containing waste. Dam failures are comparatively rare, but can cause immense damage and loss of life when they occur. General dam failure can be attributed to foundation failure (leakage and piping), concrete or mortar deterioration, flow erosion and timber deterioration ^{xii} .
Desertification	Desertification is a global environmental challenge that affects the biological productivity of dryland ecosystems. This in turns impacts on the livelihoods of people that depend on the productive capacity of the dryland ecosystem. Desertification is brought about by land degradation which is fuelled by factors including variations in climate, and human activities of overexploitation and overgrazing. This process continuously transforms a land's appearance by creating larger empty spaces over a large strip of land and results in the 'permanent' loss of productivity and supply of ecosystem services ^{xiii} .
Development planning	An integrated, multi-sectoral process through which governmental institutions streamline social, economic and spatial growth.
Disaster	A disaster means a progressive or sudden, widespread or localised, natural or human-caused occurrence. It is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources ^{xiv} .
Disaster risk	The potential disaster losses, in lives, health, status, livelihoods, assets and services, which could occur to a particular community or society over a specified future time period.
Disaster management	This term is an extension of the more general term 'Risk Management' to address the specific issue of disaster risks. Disaster management means a continuous and integrated multi-sectoral, multi-disciplinary process of planning and implementation of measures to prevent or reduce the risk of disasters; mitigate the severity or consequences of disasters; emergency preparedness; a rapid and effective response to disasters; and post-disaster recovery and rehabilitation. It is the

	systematic process of using administrative directives, organisations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. Disaster Management aims to avoid, lessen or transfer the adverse effects of hazards through activities and measures for prevention, mitigation and preparedness ^{xv} .
Disaster Management Centre (DMC)	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 Management Plan (DMP)	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 through hazard identification, risk and vulnerability assessment, risk reduction and mitigation, planning and preparedness, emergency response, relief and recovery efforts.
Disaster Risk Reduction	The conceptual framework of elements considered with possibilities to minimise vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.
Disaster Risk Reduction Plan	A document prepared by an authority, sector, organisation or enterprise that sets out goals and specific objectives for reducing disaster risks together with related actions to accomplish these objectives.
District Municipality (DM)	In terms of section 155(1) of the Constitution the Kannaland LM is a category B municipality which means it has municipal executive and legislative authority in an area which includes more than one municipality ^{xvi} . The purpose of district municipalities and local municipalities sharing the responsibility for local government in their areas is to ensure that all communities, particularly disadvantaged communities, have equal access to resources and services.
Drought	A drought is a shortage of precipitation over an extended period and it entails deficient rainfall relative to the statistical multi-year average for a region ^{xvii} . Drought is not merely low rainfall, but a relative concept based on the expected, or average, rainfall of an area, whether desert or tropical, for any given time of year ^{xviii} .
Early Warning Systems	The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss by reducing or mitigating disaster risk. It incorporates a system of data collection and analysis that monitors people's well-being (including security), in order to provide timely notice when an emergency threatens, and thus to elicit an appropriate response. An Early Warning System is the integration of four main elements: Risk Knowledge; Monitoring and Predicting; Disseminating Information; and Response. Failure of any part of the system will imply failure of the whole system ^{xix} .
Endemic species (loss of biodiversity)	Endemism is the ecological state of being uniquely distributed to a defined geographic location. Endemic species are marginally represented which makes them a concern for conservation for example many of South-Africa's endemic plants are concentrated in relatively small areas in the Kannaland LM known as regions or centres of endemism ^{xx} .
Fire	Wildland Fire: Fire that occurs in the open countryside beyond the urban limit or homestead boundary in fynbos, natural veld, plantations, crops or invasive vegetation outside a built-up area. In 50% of the cases it is not known how the fires start and the negligence of people often plays a role. Structural Fire: This is when fire involves the structural components of various residential buildings ranging from single-family detached homes and townhouses to apartments and tower blocks, or various commercial buildings ranging from offices to shopping malls. A structural fire in an informal settlement involves temporary dwellings ^{xxi} .
Floods	A flood is defined as the temporary inundation of normally dry land areas

	resulting from the overflowing of the natural or artificial confines of a river or other body of water, including groundwater^{xxii}. Flooding can result from bodies of water overflowing their banks, including artificial ones like dams; structural failures or dams; or rapid accumulation of runoff or surface water, or any combination of these.
Ground/soil pollution	The presence of toxic chemicals (pollutants or contaminants) in soil in high enough concentrations to be of risk to human health and/or ecosystem. Soil pollution may occur simply due to the fact that the levels of the contaminants in soil exceed the levels that are naturally present in soil. Pollutants may enter the soil/land via: waste disposal (e.g. landfills); air deposition dry (e.g. from mining) and wet (e.g. acid rain); or contact with contaminated surface or ground waters. Soil pollution results from the buildup of contaminants, toxic compounds, radioactive materials, salts, chemicals and cancer-causing agents. The most common soil pollutants are hydrocarbons, heavy metals (cadmium, lead, chromium, copper, zinc, mercury and arsenic), herbicides, pesticides, oils, tars and dioxins^{xxiii}.
Hazard	A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydro meteorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability^{xxiv}. There are two types of hazards with regards to their timescale: - Slow onset hazards: this type of hazard is normally preceded by a number of early signs or indicators e.g. droughts, landslides due to heavy rains and environmental degradation. - Rapid onset hazards: this type of hazard strikes without any or very little prior warning. Despite these hazards being mostly unpredictable, proper planning and preparedness can mitigate the effects of such disasters. Examples include flash floods and pest infestations.
HAZMAT	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. Dangerous or hazardous substances are identified as explosives; gases; flammable liquids; combustible materials; oxidizers; toxic materials; radioactive materials; corrosives; and chemical substances. When these hazardous substances are released during a transport incident in sufficient quantities it can put a portion of a community into immediate danger from exposure, contact, inhalation, ingestion, resulting explosions and/or fires. Where spillage occurs in environmental sensitive areas, it can result in death of fauna and flora and can cause severe contamination of resources, such as groundwater and surface water^{xxv}.
Human disease	A human disease is the impairment of the normal state of a human being that interrupts or modifies its vital functions, affecting a disproportionately large number of people^{xxvi}. Diseases affect humans in different ways, and they arise from different causes. While some diseases are caused by pathogenic organisms, such as bacteria, others seem to arise spontaneously, such as heart disease or cancer. Diseases caused by pathogenic organisms are often transmissible from one person to another, while some other diseases can be transmitted from parents to their children by inheritance.
Impact	The terms Primary Impact and Secondary Impact are used to describe the different causes and scales of potential impacts from a hazard event. Primary impacts are also called direct impacts. Secondary impacts are often referred to as indirect or induced impacts.
Incident	The difference between an incident and a disaster is that an incident is a significant event which impacts upon the localised community or geographical area. An incident only becomes a disaster once the affected population is unable to manage or cope or resist its consequences and when coordination and multiagency

	emergency management assistance is required ^{xxvii} .
Integrated Development Plan (IDP)	This term is used in relation to a municipality and means a plan envisaged in section 25 of the Local Government: Municipal Systems Act of 2000 (Act No. 32 of 2000).
Local Municipality (LM)	This is a municipality that shares municipal executive and legislative authority in its area with a district municipality within whose area it falls, and which is described in section 155 (1) of the Constitution as a category B municipality.
Major Hazardous Installation (MHI)	A MHI produces, processes, handles, uses, disposes of or stores, either permanently or temporarily, one or more hazardous substances or categories of hazardous substances or substances in quantities which exceed prescribed amounts. These facilities are most commonly: petrochemical works/facilities and refineries, chemical works and production plants, liquefied petroleum gas (LPG) stores and terminals, chemical stores and distribution centres and large fertilizer stores ^{xxviii} .
Mitigation	The lessening or limitation of the adverse impacts of hazards and related disasters.
Pollution	Pollution is the introduction into the environment of any substance property (including radiation, heat, noise and light) that has or results in direct harmful effects to humanity or the environment, or that makes the environment less fit for its intended use ^{xxix} .
Predation	In ecology, predation describes a biological interaction where a predator (an organism that is hunting) feeds on its prey (the organism that is attacked). Predators may or may not kill their prey prior to feeding on them, but the act of predation often results in the death of its prey and the eventual absorption of the prey's tissue through consumption ^{xxx} .
Preparedness	The knowledge and capacities developed by governments, professional response and recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions. These activities and measures include the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.
Prevention	The outright avoidance of adverse impacts of hazards and related disasters.
Recovery	The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.
Resilience	The capacity of a system, community or society potentially exposed to hazards to adapt by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organising itself to increase this capacity for learning from past disasters for better future protection and to improve disaster risk reduction measures.
Response	Response is the provision of emergency services and public assistance during/or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. These measures can be of immediate, short-term or long-term duration.
Risk	The combination of the probability of an event and its negative consequences.
Risk assessment	A methodology to determine the nature and extent of risk by analysing the potential harm people, property, services, livelihoods and the environments on which they depend are exposed to. Risk assessments measure the technical characteristics of hazards such as their location, intensity, frequency and probability; the analysis of exposure and vulnerability including the physical social, health, economic and environmental dimensions; and the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios ^{xxxi} .
Road accident	Road accidents occur or originate on a street open to public traffic which results in one or more persons being killed or injured and in which at least one moving vehicle was involved.
Severe storms	Wind is air in motion. The speed and direction of wind is determined by atmospheric pressure and weather systems in a particular area ^{xxxii} . See the

Beaufort Scale in *Severe Weather*.

Soil erosion

Erosion is the process of weathering and transport of solids (sediment, soil, rock and other particles) in the natural environment or their source and deposits them elsewhere. Wind and water are the main agents of soil erosion. The amount of soil they can carry away is influenced by two related factors: speed - the faster either moves, the more soil it can erode; and plant cover - plants protect the soil and in their absence wind and water can do much more damage. The loss of protective vegetation through deforestation, overgrazing, ploughing, and fire makes soil vulnerable to being swept away by wind and water^{xxxiii}.
Land degradation is defined as a decline in the overall quality of soil, water or vegetation conditions due to human activities and is often the catalyst of desertification of an area^{xxxiv}.

**Standard
Operating
Procedures
(SOP)**

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.

Thunderstorm

A thunderstorm is an atmospheric disturbance accompanied by lightning and thunder. It usually produces gusty winds, heavy rain and sometimes hail. Lightning is the defining hazard of all thunderstorms and is caused by the difference between the positively charged upper section of a cloud and the negatively charged lower section^{xxxv}.

Vulnerability

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Conditions of vulnerability and susceptibility to the impact of hazards are determined by physical, social, economic and environmental factors or processes that make them susceptible to injury, loss of life, damage, disruption, exploitation or incapacitation by all hazards.

ABBREVIATIONS AND ACRONYMS

Acronym	Explanation
AADQ	Annual Authorized Discharge Quantity
ACSA	Airports Company South Africa
AFB	Air Force Base
AFIS	Advanced Fire Information System
AFROX	African Oxygen Limited
AGIS	Agricultural Geo-referenced Information System
AHS	African Horse Sickness
AHT	Animal Health Technician
AI	Avian Influenza
AIA	Approved Inspection Authority
AIDS	Acquired Immune Deficiency Syndrome
AIS	Automatic Identification System
ALS	Amyotrophic Lateral Sclerosis
AMS	Air Mercy Service
AQA	Air Quality Act
AQM	Air Quality Management
AQMPs	Air Quality Management Plans
AQO	Air Quality Officer
ARS	Automatic Rainfall Sensor
ART	Antiretroviral Treatment or Therapy
ATNS	Air Traffic and Navigational Services Company
BCEA	Basic Conditions of Employment Act
BEE	Black Economic Empowerment
BT	Blue Tongue
CAA	Civil Aviation Authority
CAHT	Control Animal Health Technician
CAPE	Cape Action for People and the Environment
CARA	Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983)
CBA	Critical Biodiversity Area
CCC	Central Communication Centre
CFR	Cape Floristic Region
CGS	Council for Geoscience
CM	Centimeter
CMA	Catchment Management Area
COCT	City of Cape Town
COG	Department of Cooperative Governance
COPD	Chronic Obstructive Pulmonary Disease
COSCP	Coastal Oil Spill Contingency Plans
CSF	Classical Swine Fever
CSIR	Council for Scientific and Industrial Research
CTIA	Cape Town International Airport
CZMU	Coastal Zone Management Unit
DAFF	Department of Agriculture, Forestry and Fisheries
DCT	Disaster Co-ordination Team (for Kannaland Local Municipality – convened during a disaster)
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs & Development Planning
DIFR	Disabling Injury Frequency Rate
DMA	District Municipal Area
DMAF	Disaster Management Advisory Forum
DM	District Municipality
DMC	Disaster Management Centre
DMF	Disaster Management Framework
DMP	Disaster Management Plan
DMTTT	Disaster Management Technical Task Team

DoA	Department of Agriculture
DoE	Department of Energy
DoH	Department of Health
DOT	Department of Transport
DRA	Disaster Risk Assessment
DSO	Dam Safety Office
DTPW	Department of Transport and Public Works
DWA	Department of Water Affairs
EAP	Employment Assessment Programme
ECC	Emergency Control Centre
EDM	Eden District Municipality
EEA	Employment Equity Act
EEZ	Exclusive Economic Zone
E.g.	Example
EIA	Environmental Impact Assessment
Etc.	Etcetera
EMP	Environmental Management Plan
EMS	Emergency Medical Services
EPWP	Expanded Public Works Programme
ERP	Emergency Response Plan
ESA	Ecological Support Areas
EUS	Epizootic Ulcerative Syndrome
EWS	Early Warning Signal
FDI	Fire Danger Index
FDR	Fire Danger Rating
FMD	Foot and Mouth Disease
FPA	Fire Protection Associations
GAB	Great Artesian Basin
GDP	Gross Domestic Product
GE	Genetically Engineered
GEF	Global Environment Facility
GHGs	Greenhouse gases
GTL	Gas To Liquid
HACCP	Hazard Analysis & Critical Control Points
HAST	HIV/Aids, STIs and TB
HAZMAT	Hazardous Materials
HBV	Hepatitis B Virus
HCT	HIV/Aids Counselling and Testing
HCV	Hepatitis C Virus
HDACC	Health Data Advisory and Co-ordination Committee
HFA	Hyogo Framework for Action
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
IBA	Important Birding Areas
ICAD	Innovative Contractors for Advanced Dimensions
ICM	Integrated Coastal Management
IDP	Integrated Development Plan
IMO	International Maritime Organisation
IMS	Incident Management System
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
ISPF	International Ship and Port Facility Security Code
ISPS Code	International Ship and Port Facility Security Code
ITP	Integrated Transport Plan
IWMP	Integrated Waste Management Plan
IUCN	International Union for Conservation of Nature
JOC	Joint Operations Centre
KM	Kilometre

KPA	Key Performance Area
KPI	Key Performance Indicator
LDN	Lightning Detection Networks
LM	Local Municipality
LPG	Liquefied Petroleum Gas
LPZ	Longer Term Protective Action Zone
LRA	Labour Relations Act
LRIT	Long Range Identification and Tracking
M	Metre
MAS	Maritime Assistance Service
MDG	Millennium Development Goal
MFMA	Municipal Financial Management Act
MHEWS	Multi-Hazard Early Warning System
MHI	Major Hazardous Installation
MIG	Municipal Infrastructure Grant
MIMP	Multi-disciplinary Incident Management Procedure
MOU	Memorandum of Understanding
MPA	Marine Protected Areas
MRCC	Maritime Rescue Coordination Centre
MRSC	Maritime Rescue Sub-Centre
MSI	Maritime Safety Information
MW	Mega Watt
NAC	National Agrometeorological Committee
NAP	National Action Programme
NAVTEX	Navigational Telex
NBA	National Biodiversity Assessment
NCC	National Control Centre
ND	Newcastle Disease
NDA	National Department of Agriculture
NDMC	National Disaster Management Centre
NDMF	Policy Framework for Disaster Management in South Africa
NDP	National Development Plan
NEMA	National Environmental Management Act
NEMP	National Eutrophication Monitoring Programme
NERSA	National Energy Regulator of South Africa
NGO	Non-Governmental Organisation
NMMP	National Microbial Monitoring Programme
NNR	National Nuclear Regulator
NPAES	National Protected Areas Expansion Strategy
NPO	Non-Profit Organisation
NSBA	National Spatial Biodiversity Assessment
NSRI	National Sea Rescue Institute
Kannaland	Kannaland Local Municipality
LM	
OIE	World Organisation for Animal Health
PAZ	Precautionary Action Zone
PCR	Polymerase Chain Reaction
PDMC	Provincial Disaster Management Centre
PDSI	Palmer Drought Severity Index
PESTLE	Political, Economic, Social, Technological, Legislative and Environmental
PGWC	Provincial Government of the Western Cape
PHC	Public Health Care
PMF	Predator Management Forum
PRASA	Passenger Rail Agency of South Africa
Prov	Province
PRRS	Porcine Reproductive And Respiratory Syndrome
PSC	Project Steering Committee
PTSD	Post-Traumatic Stress Disorder

PVC	Polyvinyl chloride
RBIG	Regional Bulk Infrastructure Grant
RDP	Reconstruction and Development Programme
REM	Radio Equivalent Man
RIC	Rail Incident Commander
RRA	Ramp en Risiko Assessering
RSC	Rescue Sub Centre
RSMS	Road Safety Management System
RTMCC	Road Traffic Management Coordinating Committee
RVF	Rift Valley Fever
SAB	South African Breweries
SADC	South Africa Development Community
SAFFG	South African Flash Flood Guidance
SAFREP	South African Ship Reporting System
SAMSA	South African Maritime Safety Authority
SANBI	South African National Biodiversity Institute
SANCCOB	Southern African Foundation for the Conservation of Coastal Birds
SANDF	South African National Defense Force
SANDMC	South African National Disaster Management Centre
SANDMF	South African National Disaster Management Framework
SANParks	South Africa National Parks
SANRAL	South African National Roads Agency Limited
SANS	South African National Standard
SAPS	South African Police Service
SAR	Search And Rescue
SASAR	South African Search and Rescue
SAWDIS	South African Weather and Disaster Information Service
SAWS	South African Weather Service
SCFPA	Southern Cape Fire Protection Association
SDA	Skills Development Act
SIDS	Silent Infant Death Syndrome
SMA	Special Management Area
SOLAS	Safety of Life at Sea
SOPs	Standard Operating Procedures
SPF	Sun Protection Factor
SPI	Standardized Precipitation Index
SRR	Search and Rescue Region
STI	Sexually Transmitted Infection
STCW	Standards of Training, Certification and Watch keeping
SUDI	Sudden Unexpected Death Infant
SWWS	Severe Weather Warning System
TB	Tuberculosis
TFR	Transnet Freight Rail
TMS	Table Mountain Sandstone
TNPA	Transnet National Ports Authority
UNCCD	United Nations Convention to Combat Desertification
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCRs	United Nations High Commission for Refuge
USGS	United States Geological Survey
UV	Ultraviolet
VIP	Ventilated Improved Pit
VMS	Vessel Monitoring System
VPN	Veterinary Procedural Notices
VTs	Vessel Tracking System
WANO	World Association of Nuclear Operators
WIS	Workplace Information Systems
WMA	Water Management Area
WOF	Working on Fire

WSP	Water Service Provider
WSA	Water Scarce Area
WWF	World Wildlife Fund
WWTW	Waste Water Treatment Works
WWQ	Waste Water Quality
XDR-TB	Extensively Drug-Resistant Tuberculosis

PART ONE

EXECUTIVE SUMMARY

The Kannaland Local Municipality (KLM) is primarily responsible for the implementation of the Disaster Management Act (No. 57 of 2002) within its area of jurisdiction, with a specific focus on ensuring effective and focused disaster risk reduction planning.

With the new approach to Disaster Risk Management in South Africa and world-wide, the emphasis changed from response to disasters to pre-disaster risk reduction. The process of disaster risk reduction should therefore commence with a process of risk identification and assessment.

The outcomes of a disaster risk assessment can ensure that all developmental initiatives as well as contingency planning and practice of the municipality are informed by accurate knowledge of disaster risk, enabling various stakeholders to contribute to the reduction of disaster risk.

This study was undertaken with the aim of providing relevant Eden District Municipality (EDM) disaster risk managers and KLM municipal role-players with a user-friendly working document focusing on pertinent risks in the KLM.

The Western Cape Risk Assessment Methodology was followed in conducting this Risk Assessment Report and as such, it includes a Community Based Risk Assessment (CBRA) from the KLM to ensure that the updated risk profile for the EDM provides a comprehensive picture.

The aim of the project was to undertake a Disaster Risk Assessment (DRA) within the KLM. The DRA had to be done in accordance with the Western Cape Standardised Disaster Risk Assessment Methodology. The DRA had to focus on the risks as highlighted in the EDM risk assessment document as well as the Kannaland Municipal Disaster Risk Template.

The risk assessment consisted of the following:

- Undertaking a current reality assessment of the said area.
- Engaging stakeholders via workshops to determine the perceived risk for the said area.
- Mapping areas of high risk within the area.
- Analysing and consolidating results.
- Incorporating results of the community based disaster risk assessment.
- Identifying possible risk reduction projects and programmes for the prioritised risks.

INTRODUCTION

THE KANNALND LOCAL MUNICIPALITY

The Kannaland Local Municipality is a category-B municipality located in the Eden District Municipality and contains the towns of Ladismith, Calitzdorp, Van Wyksdorp and Zoar.

The municipality lies between two mountain ranges, the Swartberge and Anysberg and is situated about 340km north-east of Cape Town along the R62 tourism route. The administrative offices of the Kannaland Municipality are located in Ladismith with the municipality rendering services through satellite offices located in Calitzdorp, Van Wyksdorp and Zoar.

Two well-known cheese factories namely Parmalat and Ladismith Cheese are situated in Ladismith and are producing world famous dairy products. Ladismith wine cellars are producing high quality wine and brandy products. These three factories in Ladismith contribute significantly to job creation and economic sustainability in the Kannaland area.

The settlement of Zoar, a former Act 9 area was included in the Kannaland area in 2000 bringing with it agriculture sector opportunities which are currently untapped. Zoar has the highest number of unemployed people in Kannaland but present also the best opportunity for agricultural focused economic growth.

The town of Calitzdorp is known as the port-wine capital of South Africa due to high quality ports and wines produced in the area. The wineries in this area contribute significantly to job creation and economic sustainability in the Kannaland area.

The climate in Kannaland is known for its hot and dry summer days. The average annual rainfall is about 270 mm, with rainfall occurring throughout the year. The average midday temperatures range from 16.6°C in July to 29.6°C in January and the mercury does drop to 3.2°C during winter nights.

Kannaland's climate is ideal for the production of apricots, peaches, plums, nectarines, and grapes. Approximately 30% of the total apricot export market comes from the district. The well-known Parmalat- and Ladismith dairy products come from the area. Several wine cellars produce top quality wines, port and brandy. In this respect, the quaint little haven of Calitzdorp is known as the port-wine capitol of South Africa by virtue of the top quality wines produced mainly by Boplaas, De Krans, Axehill and Calitzdorp wine cellar. The hospitality trade is flourishing. Tourist accommodation caters for every taste, from 5-star guest houses and Bed-and-Breakfasts to rustic camping. Approximately 180 species of birds have been spotted. Vegetation is widely varied and ranges from fynbos in the mountain to Karroo broken veld, spekboom and succulent Karroo on the koppies and plains. Another endemic shrub to the Klein Karoo is the beautiful "Klapperbos".

DEMOGRAPHICS

Population

Kannaland has the smallest population in the Eden District. The table below indicates the overall population of the Kannaland area.

Population	Census 2001	Census 2011	Census 2015 update
	23971	24767	25094

The annual growth rate of the population between 2001 and 2015 was 4.9%. This positive growth rate indicates that more people are settling in the municipality, but at a very slow rate. Careful planning and budgeting has to be done to ensure sustainable urban settlements within the municipality.

The most populous areas of the municipality are in Ladismith, Calitzdorp, Zoar as well as in Van Wyksdorp. The municipality has a relatively young population with the highest number of unemployment between the ages of 15-30 years. This remains a critical area for the municipality to focus on particularly in partnership with its social partners (Government and NGO's) and in the context of its economic and social development programs.

Educational Levels

Educational facilities are largely clustered around the settlements of Ladismith, Calitzdorp, Van Wyksdorp and Zoar. No educational facilities are available in Anysberg and Plathuis in the west and in Kraaldorings, Badshoogte and Vleirivier in the eastern parts of the municipality.

Education Levels	2001	2011
No schooling	1660	115
Some primary	4378	7550
Completed primary	1634	2033
Some secondary	3826	7312
Grade 12	1683	3016
Higher	772	656

Employment and Unemployment

The table below indicates that there has been a slight increase in the labour force between 1996 and 2011. The labour force participation rate also decreased between 1996 and 2001 and then decreased to approximately 48% in 2011. This indicates that less than half of the total work force between the ages of 15 and 65 are employed or actively seeking employment. The table also indicates that there were a total of 6344 people employed in 1996. This figure increased to 6345 in 2001 and decreased to 6271 in 2011. This is noteworthy since the labour force decreased by 74 people.

	Total Population	Labour Force	LFPR%	Employed	Unemployed	Unemployment Rate %
1996	11909	7405	62.2	6344	1061	14.3
2001	14622	7365	50.4	6345	1020	13.8
2011	15728	7587	48.2	6271	1316	17.3

Bio-profile of the Kannaland Municipal area

Size of the Municipality	475 807.9Ha
Areas remaining natural	362 408.9Ha
Areas where no natural habitat remains	113 396.1Ha
Land-based protected areas	12 reserves covering 81 911.2Ha
Biomes	Albany Thicket 42 932.9Ha Fynbos 166 457.5Ha Succulent Karoo 266 416.5Ha Azonal Vegetation (3%)
Threatened Terrestrial Ecosystems	17
Vegetation Types	
Critically endangered	1 covering 3740.9Ha
Endangered	None
Vulnerable	3 covering 11 22.8Ha
Water Management Areas	1
Wetlands	936 covering 983.9Ha

BACKGROUND TO THE DISASTER RISK ASSESSMENTS

The KLM does not have a risk assessment and it is crucial to ensure that it informs all other risk reduction initiatives which should be included in the integrated development planning process of the KLM.

The WC DMC developed a standardised disaster risk assessment methodology consisting of 10 criteria to ensure that all risk assessments done in the Western Cape Province conforms to a uniform standard and to facilitate uniform and speedy updating of the district and provincial risk profiles. This risk assessment methodology entails hazard identification, vulnerability and capacity assessment and risk prioritisation for the KLM. The foregoing was done with due consideration of the National Disaster Management legislation and the EDM district level risk assessment done in 2013.

The Disaster Risk Assessment was evaluated against the standards as laid down in South Africa's Framework for Disaster Management (DN654 of 2005), with specific reference to Key Performance Area 2, Disaster Risk Assessment.

The National Disaster Management Framework (NDMF) comprises four key performance indicators, namely institutional capacity; risk assessment; risk reduction and response and recovery. Included in the NDMF there are also three supportive enablers required to achieve the objectives set out in the Key Performance Areas (KPA's), namely, information and communication; training, education and awareness; and funding.

The 2013 DRA indicated which risks were identified in the EDM and with the national and provincial frameworks as basis. The figure below lists the priority hazards identified during the 2008 DRA and new hazards identified during the 2013 DRA ("Not listed in priority sequence").

DISASTER RISK ASSESSMENTS PROCESS

Risk perceptions are very complex as they are rooted in history, politics and the economy. Finding suitable solutions to those at risk is not a simple, straightforward process.

In many cases it is far more cost-effective to prevent disasters from occurring beforehand than to recover from them afterwards. In developing countries, the United Nations Development Programme (UNDP) is promoting the goal of sustainable development and it is argued that disaster risk awareness considerations should be incorporated into all development programmes and planning, both to protect the development process and to reduce the risk of wasting scarce development resources. In South Africa, the aim of the Act is to further mitigation and to include this in the Integrated Development Plans (IDPs) being implemented throughout the country. These projects are prompted by growing awareness of the disaster risks faced and increasing realisation that some level of protection is possible. The question that arises, is: How can these disaster risks be assessed and how can decisions be made on the appropriate level of protection?

LEGAL BACKGROUND

KPA 2 of the NDMF addresses disaster risk assessment. The following extract from the NDMF indicates the necessity to conduct such a risk assessment:

Disaster risk assessment and risk reduction planning:

South Africa faces many different types of risk on a daily basis, including health risks, environmental risks, financial risks and security risks. However, disaster risk specifically refers to the likelihood of harm or loss due to the action of natural or other hazards or other external threats on vulnerable structures, services, areas, communities and households.

Disaster risk assessment is the first step in planning an effective disaster risk reduction programme. It examines the likelihood and outcomes of expected disaster events. This would include investigating related hazards and conditions of vulnerability that increase the chances of loss.

Disaster risk assessment planning requires identification of key stakeholders, as well as consultation with them about the design and/or implementation of the assessment and the interpretation of the findings.

Relevant national organs of state must execute systematic disaster risk assessments in the following instances:

- prior to the implementation of any national disaster risk reduction, preparedness or recovery programme
- as an integral component of the planning phase for large-scale housing, infrastructure or commercial/industrial developments of national significance
- as an integral component of the planning phase for nationally significant initiatives that affect the natural environment
- When social, economic, infrastructural, environmental, climatic or other indicators suggest changing patterns of risk that increase the likelihood of nationally significant disaster impacts.

All national organs of state must carry out disaster risk assessments to identify priority disaster risks relevant to their functional areas. Where possible, these should be undertaken interdepartmentally to avoid duplication of efforts and to ensure uniformity of findings.

All proposed disaster risk assessments and related studies planned by national and provincial organs of state must be reviewed by the NDMC prior to implementation to ensure consistency in approach.

COMMUNITY BASED DISASTER RISK MANAGEMENT

THE WESTERN CAPE AND CB-DRM

The Western Cape has been home to raging fires and other environmental hazards such as floods which have jarred the foundations of vulnerable populations in the province. For example: in Dec 2004, August 2006, 2007, 2008 and 2014 flooding and hailstorms hit the Eden District Municipality. Generally, thousands of households in the province and beyond suffer severe losses in informal dwelling fires. During floods and fires, poor families suffer significant development setbacks. These disasters are also costly for the affected municipalities and provincial departments, and divert resources from other urgently needed services. In view of this, policy makers have been engaged in concerted efforts in “Making the Western Cape a home for all” through disaster risk reduction.

COMMUNITIES AND INDIGENOUS KNOWLEDGE

For the purpose of Community Based Disaster Risk Assessment (CBRA), a community is seen as a group that may share one or more things in common such as living in the same environment, similar disaster risk exposure, or having been affected by a disaster. Common problems, concerns and hopes regarding disaster risks may also be shared. However, people living in a community, for example men, women and children, have different vulnerabilities and capacities. Some may be more vulnerable or more capable than others. The level of education and perceptions of the community members that take part in such an assessment will have a big influence on the outcomes of the CBRA.

A benefit of CBRA is the fact that it strongly supports indigenous knowledge. “Indigenous knowledge may be defined as knowledge that has been created and developed over a period of time. Indigenous knowledge represents generations of creative thoughts and actions within a particular community in an eco-system generated to keep abreast of ever-changing agro-ecological and socio-economic environment. Many writers on indigenous knowledge agree that it also encompasses non-technical insights, wisdom, ideas, perceptions and innovative capabilities and usually passed from generation to generation.” During this process, indigenous knowledge was thus also gathered. Ground trothing of other available information, e.g. both documented and undocumented historic events could also be done via this route.

EARLY WARNING SYSTEMS (EWS)

Early warning represents a cornerstone of disaster reduction. Effective early warning depends upon a multi-sectoral and interdisciplinary collaboration. Emphasis should be given to developing capacities that are relevant, and responsive to the needs of local communities as expressed and defined in the risk profile.

The issues of early warning should be brought to the highest levels of deliberation within the NDMC system and intergovernmental structures at national and regional levels. Specific successor arrangements for the continued promotion of disaster reduction should be made. The ultimate goal of

hazard forecasting and early warning systems is to protect lives and property. They therefore constitute one of the key elements of any disaster reduction strategy.

To serve people effectively, systems must be integrated and link all actors in the early warning chain including the scientific and technical community, public authorities and local communities. Early warning must be complemented by professional services, training and capacity-building activities and the allocation of resources to enable timely actions to be taken to avert loss.

Three key prerequisites on which to build effective early warning systems:

- Political responsibility to promote integrated early warning strategies;
- Human dimensions of early warning; and
- National and regional support.

PART TWO

HYDRO-METEOROLOGICAL HAZARDS

WATER RELATED

FLOODS

A flood is defined as the temporary inundation of normally dry land areas resulting from the overflowing of the natural or artificial confines of a river or other body of water, including groundwater.

Flash floods are caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Flash floods are usually characterized by raging torrents after heavy rains that rip through river beds, urban streets, or mountain canyons sweeping everything before them. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen, for instance after a levee or dam has failed, or after a sudden release of water by a debris or ice jam.

The basic cause of most river floods is excessive rainfall which causes significant elevations in river levels. The effect of elevated water levels is the inundation of low lying river floodplain areas.

1. Early Warning Signals

Good emergency management before, during and after severe storms depends on access to real-time weather warnings. Over and above the severe weather warnings distributed by the South African Weather Service there are a number of "local" early warning systems operating in the EDM i.e.:

- The South African Weather and Disaster Information Service (SAWDIS) and associated Internet blog established in October 2008. The blog provides up to-the minute weather reports, weather maps, photographs, satellite images, and relevant information on disasters around the world.
- The flood early-warning system developed by NSRI Station 14 in Plettenberg Bay ('NSRI Plett'), links information on upper catchment rainfall and water levels to the likelihood of downstream flooding.
- Cut-off low systems and cold fronts;
- Mid-latitude cyclone coupled with a second cold front;
- Prolonged, high-intensity rainfall;
- Violent thunderstorms of short duration cause flash floods; and
- Moisture availability, a suitable mechanism and environmental condition to induce cloud formation are prerequisites for precipitation. Increased atmospheric moisture (predicted) suggests increased precipitation, should the other factors be in place.

2. Hazard Frequency

Research has indicated that floods regularly occur in the EDM; and cut-off lows also bring a range of severe types of weather; including torrential rainfall, snow in the mountains etc.

Cut-off lows influence the Eden region climate. They are more intense forms of the westerly trough. The low pressure deepens, reaching the surface and gets cut off from the westerly current. These deep lows are sources of major upper-air divergence and flood-producing rains.

3. Areas, Communities or households most at risk

FLOODS

In order to plan for increases in flood risk, the identification of “high risk” areas is important as well as the understanding of general trends and future rainfall projections for that area. There is a significant risk of flash floods occurring in the valleys that cut deeply through the coastal plains throughout the region. There is also a risk of general flooding throughout the district.

The vulnerable areas in the Kannaland Municipality include:

- Farming communities – situated on the banks of the rivers;
- The urban poor;
- Local access roads and some houses in Zoar get cut-off;
- Road users, to outdoor recreationists and other members of the community;
- Other low-lying areas with insufficient drainage;
- Floodplains of watercourses or areas above major underground infrastructure;
- Areas situated next to stormwater detention/retention ponds.

4. Likely impacts of hazard

Economic	Environmental	Social
- Loss of economic growth due to damage and service disruptions; - Increase in maintenance and recovery costs prices; - Loss to recreational/tourism industry; - Loss to industries directly dependent on marine business; - Damage to commercial forestry plantations; - Damage to crops; - Rerouting of traffic on routes which are longer and add to cost of transport.	- Increases waves and resultant damage; - Disruption of critical Municipal infrastructure; - Increased demand for recovery and repair operations; - Disruption of communication and electrical services; - Increased risk to soil erosion and desertification; - Damage and degradation of marine and wildlife habitat; - Damage to irrigation channels and other infrastructure.	- Increase in lower respiratory infections; - Loss of human life and lively hoods; - Job losses and social conflict; and - Increase in respiratory disease outbreaks (Human).

5. Level of risk for different situations and conditions

FLOODS

Flooding occurs mainly during the rainy seasons or when incidences of deluges occur. However, generally speaking, with the change in weather patterns it is difficult to predict when floods will occur generally speaking it would be during the rainy season.

6. Conditions of vulnerability that increase the severity of the hazard

Natural	Socio-Economic	Technological
CUT-OFF LOWS: Cyclonic frontal weather systems, particularly cut-off low pressure systems increase flood risk. Cut-off low weather systems are largely associated with great atmospheric instability and convection, resulting in intense rainfall, snow on high altitude surfaces and strong winds. As a result, cut-off lows are often one of the main drivers behind severe floods in the Western Cape; and keeping dam levels too high can greatly increase the risk of overtopping if an extreme event, such as a cut-off low, were to fall over the catchment area. The Western Cape is a water scarce area. As the intensity of rainfall increases, so does the potential maximum flood peak due to increased amounts of water being in the system. Flood peak maxima are expected to increase due to an increase in extreme rainfall in the region; Environmental degradation may further be exacerbated by the occurrence of erosion and wetlands disturbance as a result of floods; Another flood-risk driver is debris-loading from soil erosion because the exposure of large tracts of land for wheat planting, along with vegetative debris-loading associated with alien vegetation clearance. Cleared alien plants left to decompose near rivers are washed into watercourses and then swept downstream, where they obstruct channels and bridge.	Lower socio-economic classes: due to communities' social and economic status they do not have the financial resources to have insurance against damage to their homes and belongings. This is exacerbated further by unemployment coupled with rapid coastal urbanisation; In the case of the low-cost formal housing, it is clear that houses bear the brunt of surface run-off from roads that have shallow drains and inadequate stormwater capacity; Inappropriate land use as the quick expansion and urbanisation of towns means that there aren't proper storm water systems and drainage provided; Flood management practices and policies have previously been mostly concerned with post-event recovery rather than implementing flood mitigation, reduction and prevention practices. This has resulted in a reactive rather than proactive method of dealing with flood events.	Lack of real-time monitoring resources i.e. tidal and river gages; Lack of capacity at regional and local level to interpret weather data; The lack of or inadequate continuous real time data in the KLM facilities i.e. radar and satellite weather data including automatic rainfall stations, automatic weather stations and lightning detection networks Lightning Detection Networks (LDNs); Often the existing pipes are too small to handle the capacity of the flood;

FLOODS

7. Capabilities or resources that exist to manage the risk

Building of dams and reservoirs, dikes and levees, dongas and gully retaining ponds, flood channels, and flood walls may assist to reduce flooding.

Good communication and working relations between KLM, EDM, Provincial Government Western Cape (PGWC) and South African National Road Agency Limited (SANRAL). Capacity and equipment for road repairs at Provincial, District and Local Levels; and stormwater maintenance/upgrading programmes for the KLM.

- The National Department of Agriculture, Forestry and Fisheries is in the process of developing a Flood Coping Strategies document;
- The Western Cape Government has an online guideline on how to protect your home against floods and fires. It is available online at: <http://www.westerncape.gov.za/gc-news/416/10593>;
- Climate risk management should be integrated into all local planning and regulatory processes especially to incorporate risk assessment for flood, run-off, slope failure and subsidence into development planning. It should also be used to tighten land-use regulations to avoid further unravelling of protective environmental services.

8. Risk increasing or decreasing in the Kannaland LM

Risk Increasing:

In view of the fact that adverse weather conditions frequency are increasing the risk for flooding incidents will also increase. With the engineering solutions i.e. stabilization of slopes the construction of berms and regular stormwater cleaning and maintenance programmes, the incidents of stormwater damage have decreased in certain areas; and the problems experienced with integrated river management activities however exacerbate the problem of flooding.

- Informal backyard dwellings in low-lying flood areas are erected annually despite knowledge of the risk;
- The potential impact of flooding is further exacerbated by the increase of agricultural land and change in land use within river catchments and reduced storage capacities of reservoirs due to increased rates of sedimentation;
- The backlog with repair and upgrading of irrigation channels, agricultural land and river management activities however exacerbates the problem of flooding.

Risk Decreasing:

- In the event of repeated flood damage LMs decreased their annual damages by implementing better storm water systems and other drainage pipes in the affected communities; and

FLOODS

- Flood prevention workshops or mass meetings creating awareness and providing community response training should be conducted. This should be done with assistance from ward councillors to educate communities on ways and measures to prevent and minimise damage caused to property by floods. One of the most critical challenges that need to be addressed is the regular cleaning of storm water catch pits in and around communities. In addition, keeping the Western Cape residential roads free from rubble and debris will immensely assist with mitigation of damage caused by flooding.

9. Impact the risk has on the development progress in the areas, communities and households it affects

Development poses a problem especially those close to rivers, coastal developments, lake and lagoon areas and flood plains. If cognisance is not taken of flood lines, location of flood plains, location of adjacent water bodies, dams etc., investment into developments and infrastructure can be destroyed within hours.

10. Secondary impacts within areas and communities affected by the risk

- Increased risk of deaths, injuries and infectious, respiratory and skin diseases;
- Disruption of settlements, commerce, transport and societies due to flooding;
- Temporary education: setting up school facilities including sanitation facilities;
- Providing emergency plastic sheeting and food for water-logged communities;
- Loss of agricultural development and production;
- Loss of production due to infrastructure damage;
- Road damage adds to cost of essential supplies and products;
- Loss of job opportunities;
- Socio economic deterioration in areas;
- Negative influence on tourism industry and activities;
- Providing water storage and extra blankets; and
- Psychosocial counselling required for the affected population.

HYDRO-METEOROLOGICAL HAZARDS

ATMOSPHERE RELATED

SEVERE WEATHER (WINDS)

The Kannaland LM has a history of severe storms accompanied by strong winds.

Wind is a current of air, especially a natural one that moves along or parallel to the ground, moving from an area of high pressure to an area of low pressure.

1. Early Warning Signals

- Pressure distribution (see the Beaufort Wind Scale below);
- Basic movement of air masses;
- Coastal low pressure systems; and
- A cut-off low pressure system in the mid to upper levels of the atmosphere and a ridging surface high pressure will be responsible for these adverse weather conditions. As a consequence of heavy rains, the river and stream systems will begin flowing strongly and thus the public is warned about the danger of road and flash-flooding.

Beaufort Wind Scale

	Force & Strength	Description
	0 < 1 km/hr < 1 knot	Calm Smoke Rises Vertically
	1 1-5 km/hr 1-3 knots	Light Air Wind Direction Shown by smoke drift, not wind vanes
	2 6-11 km/hr 4-6 knots	Light Breeze Wind felt on face, leaves rustle, wind vanes move by wind
	3 12-19 km/hr 7-10 knots	Gentle Breeze Leaves and twigs in constant motion, wind extends a light flag
	4 20-28 km/hr 11-16 knots	Moderate Breeze Raises dust and loose paper, small branches move
	5 29-38 km/hr 17-21 knots	Fresh Breeze Small trees sway, crested wavelets form on inland waters
	6 39-49 km/hr 22-27 knots	Strong Breeze Large branches move, Umbrellas hard to use
	7 50-61 km/hr 28-33 knots	Near Gale Whole trees move, breaks twigs off trees, difficulty walking against the wind.
	8 62-74 km/hr 34-40 knots	Gale Breaks twigs off trees, generally impedes progress
	9 75-88 km/hr 41-47 knots	Strong Gale Slight structural damage (eg. Chimney pots, roof tiles removed)
	10 89-102 km/hr 48-55 knots	Storm Seldom inland, trees uprooted, considerable structural damage

SEVERE WEATHER (WINDS)

2. Hazard Frequency

Severe storms are atmospheric disturbances usually characterised by strong winds, with rain, flash flooding, hail, thunder and lightning, in various combinations. This includes unusual weather disturbances such as tornadoes, hurricanes, flash flooding or waterspouts.

Severe storms are localised events, usually affecting smaller areas than tropical cyclones and floods, so their devastating impact is often underestimated. The speed and direction of wind is determined by atmospheric pressure and weather systems in a particular area.

Strong winds are more likely to occur during the summer months, with the prevalence of the South-Easter. Strong winds and gusts during winter months are usually caused by strong cold fronts, moving mostly over the southern half of South Africa.

3. Areas, communities or households most at risk

- Farming communities;
- Informal settlements;
- Poorly constructed houses;
- Gravel roads, coastal roads and municipal infrastructure;
- Areas near to high trees and/or forestry areas (falling trees); and
- Communication infrastructure.

4. Likely Impacts of hazard

Economic	Environmental	Social
- Loss of economic growth due to damage and service disruptions; - Increase in maintenance and recovery costs prices; - Loss to recreational/tourism industry; - Damage to commercial forestry plantations; - Damage to crops; - Disruption of critical Municipal infrastructure.	- In summer, strong winds promote fire and contribute to erosion particularly where it moves over the escarpment and removes the natural vegetation; - Crop damage, cave-ins, mud slides, debris flows and sink holes; and - Erosion which leads to land degradation.	- Loss of livelihood; - Increase in poverty; - Increase in respiratory disease outbreaks (human); and - Possible injuries and loss of life.

5. Level of risk for different situations and conditions

Summer:

A typical Mediterranean climate prevails in the Kannaland LM; summers are warm and winters mild. The most frequent summer winds are east, west and southeast. It is a known fact that the strength of

SEVERE WEATHER (WINDS)

south-easterly winds increase in summer. The annual maximum wind gusts caused by the ridging of the Atlantic and Indian Ocean high pressure system are evident along the Western and South-Western Cape coasts and adjacent interior.

Winter:

Winds are predominantly south-east and south-west. The western area experiences more wind than the central and eastern regions. The influence of the sea results in moderate temperature ranges along the coastal zone and coastal platform. Lower temperatures are experienced at increased altitudes in the mountains.

The strength of west and south-westerly winds increases in winter from August to September. Prevailing winds blow from the north- and south-west in the winter. Strong winds and gusts during these winter months are usually caused by strong cold fronts, moving mostly over the southern half of South Africa. Another causal factor is the ridging of the high pressure systems behind the fronts.

6. Conditions of vulnerability that increase the severity of the hazard

- A lack of thorough implementation of the national building regulations, with the resultant sub-standard and structurally weak informal dwelling;
- Falling and uprooted trees along roads, power lines and telephone lines; and
- General lack of preparedness and awareness in local communities.

7. Capabilities or resources that exist to manage the risk

South Africa is divided into strong wind climate zones, which indicate the main sources of annual maximum wind gusts. Strong winds are generally predictable therefore it is possible to issue warnings to the public, and these warnings are generally received from the South African Weather Service (SAWS).

On 1 May 2013 SAWS introduced a revised classification of severe weather related hazards as part of its Severe Weather Warning System (SWWS). This modification takes into account international trends as well as local inputs from South African disaster management structures. The new system will issue watches and warnings only for six potentially disastrous weather hazards. Other less disastrous weather hazards will be covered by special weather advisories. The main purpose of this change is to encourage appropriate response among the public and disaster management when a warning is issued for a potentially disastrous situation. Watches and warnings will be issued according to six severe weather related hazards: heavy rain; flash flooding or localized urban flooding; severe thunderstorms; gale force winds; disruptive snow falls; high swell or waves; and high wildland fire danger.

Special Weather Advisories will be issued when unusual or uncommon weather conditions are expected, where the nature of the weather threat is not necessarily disastrous, but is still of importance

SEVERE WEATHER (WINDS)

to the public. Such advisories will be issued through the media (radio, TV) and on their website up to 5 days in advance.

Other resources

- Strengthening of houses and other infrastructure to resist storms;
- Encouraging relevant insurance coverage by all stakeholders; and
- More sustainable agricultural practices are being implemented which mitigates the impact of the wind.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

- Mild to moderate increase in wind velocity in summer, autumn and spring; and
- Moderate to strong increases in wind velocity in winter. The foregoing therefore indicates that there is an increase in risk of storm wind related incidents.

Risk decreasing (see section 7 above)

9. Impact the risk has on the development progress in the areas, communities and households it affects

Impact of the risk on development activities in the potentially affected areas, communities and households.

Extreme events have a negative effect on development and should developers not take cognisance of the prevailing risks in the development area the negative effects of such risks will be exacerbated when they occur.

If there are indications that development areas may be exposed to or increase vulnerability to severe wind conditions, any further residential, services and infrastructure development should take note of the foregoing and suitable prevention and protection measures must be included in the development planning.

10. Secondary impacts within areas and communities affected by the risk

- Increased costs for strengthening of structures and services;
- Restriction of any sporting and outdoor events;
- Negative effect on tourism during windy periods; and
- It is however critical to also consider longer term effects like lower yields for possible 3-5 seasons due to the damage of the trees, a possible loss of income for seasonal workers on the farms, market opportunities lost due to inconsistent delivery and a total re-planning of realistic medium and long term goals for the farming enterprise.

DROUGHT

Drought is a normal, recurring feature of nature; it occurs in virtually all climatic regimes and there is no universal definition of drought because it is a creeping phenomenon with neither a distinct start nor finish. Drought is either the absence or deficiency of rainfall from its normal pattern in a region for an extended period of time leading to general suffering in the society. It is interplay between the demands that people place on the natural supply of water and the natural occurrences that provide water to a given geographical region. The more the imbalance between supply and demand, the more severe is the drought. The effects of drought accumulate slowly over an extended period of time. The following factors will help explain this general description of drought further:

- It is a slow on-set disaster and it is difficult to demarcate the time of its onset and the end;
- Any unusual dry period which results in a shortage of useful water;
- Drought is a normal, recurrent feature of climate. Climate is expected to show some aberrations and drought is just a part of it;
- Drought can occur by irregular distribution of rain in time and space, and not just by its amount;
- Drought is a negative balance between rainfall and water use through evaporation, transpiration by plants, domestic and industrial uses etc. in a geographical region.

Though drought is basically caused by a shortfall in rainfall, which is a meteorological phenomenon, it manifests into different spheres because of various vulnerability factors associated with them. Some of these factors are human induced. Though drought is a natural hazard, its effects are made worst in developing countries by over-population, over-grazing, deforestation, soil erosion, excessive use of ground and surface water for growing crops and loss of biodiversity.

The following are the different classifications of drought:

- **Meteorological drought** is usually defined by the measure of the departure of precipitation from the normal and the duration of the dry period. It is insufficient to meet the demands of human activities and the environment. This is the most important type of drought which drives the other type of droughts discussed below.
- **Agricultural drought** links various characteristics of meteorological (or hydrological) drought to agricultural impacts, focusing on precipitation shortages, soil water deficits, reduced groundwater or reservoir levels below the optimal level required by a crop during each different growth stage needed for irrigation.

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- **Hydrological drought** usually refers to a period of below normal surface and subsurface water levels or supplies (such as stream flow, reservoir/lake levels, ground water). This can potentially result in significant societal impacts. Water in hydrologic storage systems such as reservoirs and rivers are often used for multiple purposes such as flood control, irrigation, recreation, navigation, hydropower, and wildlife habitat. Competition for water in these storage systems escalates during drought and conflicts between water users increase significantly.
- **Socio-economic drought** refers to the situation that occurs when economic goods associated with the elements of meteorological, agricultural and hydrological drought fail to meet the demand. It represents the impact of drought on human activities, including both indirect and direct impacts.

Droughts are predictable, slow-onset phenomena. Water scarcity, on one hand, and drought, on the other, should be considered different matters. Water scarcity refers to average water imbalances between supply and demand, while droughts, as a natural phenomenon, refer to important deviations from the average levels of natural water availability.

- **Green drought** occurs when excessive grazing pressure is exercised. This causes food shortages, even though the vegetation appears green and soil moisture reserves are favourable, or where during a drought natural occurrences such as rain showers promote a short spell of green growth not enough for breaking the drought. A green drought can also occur where insects severely attack plants/ pests predators attack livestock and deplete the fodder to such a degree that it takes on the appearance of a drought situation. There remains a shortage of fodder in spite of favourable circumstances. The most common pests include locusts, Karoo caterpillar and the commando caterpillar.

1. Early Warning Signals

Animals

Change in the behaviour of animals is a warning sign of drought. Farmers notice that cattle won't feed as much as the animals when they are simply too hot; cows in such a condition do not give as much milk. Hens will decrease their egg-laying.

Alien Plants

An increase in invasive alien plants.

Diseases

Unusual and unseasonal changes in the prevalence rates of specific communicable diseases associated with personal and environmental hygiene, principally non-venereal skin diseases and diarrhoeal

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diseases.

Meteorological

Meteorological information indicating below normal rainfall patterns, long-term and seasonal weather forecasts, climate change modelling agricultural information, production estimates, price trends of food and feed are also key indicators of an impending drought.

Plants

Signs of stress in plant life are another key parameter warning of approaching drought and include wilting, a decrease in growth or no growth. Foliage appears yellow or yellow green, leaves die earlier, wood or bark cracks, stems and twigs die, flowers fail to open and fruit drops.

Rainfall

The expected decrease in rainfall will result in reduced runoff into rivers and reduced recharge of aquifers. This will lead to a reduction in the yield of surface water and groundwater supply systems, and general water shortages. This expected decrease in rainfall illustrates that droughts are slow onset hazards but that the duration of a drought is much longer as it can range anywhere from 5 to 10 years.

Water Level

Water level is also a key variable in monitoring drought - water levels in streams, dams, and rivers, a lessening of moisture in the soil and decreases in groundwater availability all are signs of drought.

2. Hazard Frequency

The current year Kannaland LM has experienced serious shortfalls as a result of the severe drought in the Kannaland LM. Both residents and farmers, particularly in the smaller towns have raised significant concerns with the Kannaland LM about the water crisis. Water supply was reached at a critical level but is currently being address through short-term and long-term interventions.

El Niño-Southern Oscillation (ENSO) phenomenon

A complex interaction of the tropical Pacific Ocean and the global atmosphere that results in irregularly occurring episodes of changed ocean and weather patterns in many parts of the world, often with significant impacts over many months, such as altered marine habitats, rainfall changes, floods, droughts, and changes in storm patterns. (UNISDR, 2009)

During the last decade in South Africa the frequency and impact of natural disasters in the farming community have increased significantly.

The expected decrease in rainfall will result in reduced runoff into rivers and reduced recharge of aquifers. This will lead to a reduction in the yield of surface water and groundwater supply systems

DROUGHT

and general water shortages. This expected decrease in rainfall illustrates that droughts are slow onset hazards but that the duration of a drought is much longer as it can range anywhere from 5 to 10 years.

3. Areas, communities or households most at risk

- The urban poor's vulnerability will increase due to rising food prices;
- Casual farm labourers can potentially face longer periods of unemployment;
- Farmers (smallholders and commercial). Low rainfall and soil moisture conditions in the Western Cape will reduce fruit, wheat and barley crops;
- Emerging farmers who may have limited capacity, resources and skills to adapt to and withstand economic pressures;
- Those that are already under economic stress economically as a result of land degradation, loss of biodiversity, and those at (or close to) the threshold of their climate tolerance;
- There are instances where socioeconomic vulnerability is compounded by insufficient access to water (for irrigation and livestock) and further amplified by poor access to fodder and livestock inoculation; and
- Agri-businesses that is dependent on the export market.

4. Likely impacts of hazard

Economic	Environmental	Social
• The impact on the export fruit industry; • Loss of economic growth or development due to a decline in agricultural producers; • Damage to crop quality and reduced food production; • Increase in food prices; • Loss of dairy and livestock production; • Unavailability of water which leads to high livestock mortality rates; • Disruption of reproduction cycles in animals; • Increase in unemployment; • Loss to recreational/tourism industry; • Loss to industries directly dependent on agricultural production (e.g. fertilizer manufacturers); and • Rural population loss.	• Increased desertification; • Leads to inferior crop and poor veld conditions; • This will lead to a reduction in the yield of surface water and groundwater supply systems and general water shortages; • Reduction and degradation of animals habitats; • Lack of feed and drinking water; • Decrease in water quality; • Increase in disease outbreaks and increased vulnerability to predation; • Increased fire danger; • Increased stress to endangered species; • Damage to plant species; • Increased risk to soil erosion; • Loss of wetlands • Increased groundwater depletion, land subsidence and reduced recharge; • Reduced water in the rivers	• Loss of human life from food shortages, heat, suicides and violence; • Mental and physical stress; • Water use conflicts; • Social unrest; • Public dissatisfaction with the government's response; • Inequity in the distribution of drought relief; • Increased respiratory ailments; • Reduced quality of life which leads to changes in lifestyle; • Increased poverty; • Population migration; • Reductions in nutrition; and • Consequently, water resources will have to be managed more carefully, and it is likely that water restrictions will be applied more frequently .

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will impact on wetlands and estuaries;

- Decrease in relative humidity; and
- Increase in pest infestation.

5. Level of risk for different situations and conditions (seasonality)

- Drought is a slow onset hazard that can occur at any time of year, although technically speaking a drought is measured over a long period of time; and
- Areas in the district that receive winter rainfall may experience drought in the following summer if rainfall was below average.

6. Conditions of vulnerability that increase the severity of the hazard

Climate Change

Climate change will result in warmer temperatures and fewer cold days which means that the area affected by drought increases and this will have further negative consequences.

Climate change has resulted in winter drought (affecting germination and growth and therefore productivity of grain crops and artificial pastures) and late (early summer), heavy rains (sometimes having a detrimental effect on harvesting), thus some farms in the region are experiencing severe financial difficulties. Consequently there are some landowners who have acknowledged that they may have to sell their farms. In addition to these immediate challenges, landowners are also concerned about the viability of farming for future generations in the area, due to the political climate and associated land reform processes. Several farmers have indicated that their children will not be taking over their farming operations and have instead opted for careers in the city or overseas;

Climate change is likely to impact negatively on biodiversity, with changes in the distribution of biomes in the Kannaland LM, possibly more frequent fires and increased growth of alien invasive plants. Among the top genera of alien invasive plants are Black Wattle, Acacias, Pines, Syringa, Eucalyptus and Prosopis.

Legislation

The fact that the DoA observes two pieces of legislation is also a problem – Animal Health Act (reactive) and Disaster Management Act (reactive and proactive). The Animal Health Act was promulgated long before the Disaster Management Act and as a result in most cases they are in direct conflict. The DoA is considering amending the Animal Health Act to align it with the Disaster Management Act.

There is a lot of irregularity and a power struggle between the work that the DOA and DEA&DP is

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conducting. This is in part due to two pieces of legislation that are not applicable on grassroots level – which requires serious intervention so that disaster risk reduction and equal service delivery can become a collaborative effort that is not hampered by bureaucratic details .

Rainfall

The level of risk depends on the type of farming – livestock farming, dryland farming or irrigation farming of permanent crops. If the farm is not diversified it means that insufficient yearly rain will lead to a critical situation.

For the past couple of years there has been insufficient rainfall and insufficient support from National Treasury to support struggling farmers. The DoA does not budget for drought schemes and the process of receiving drought scheme funds from National Treasury, to identified disaster areas, is cumbersome. Provinces still depend on the national DoA for disaster relief regardless of whether the disaster is local, provincial or national. The current scenario is that the DoA does not have an allocation for disasters in the annual budget and as a result requests funds from the National Treasury. The National Treasury on the other hand waits until budget adjustments in October/November to allocate disaster funds. This leads to huge delays before assistance reaches the affected farmers. There is a minimum waiting period of one year before financial aid is allocated to the affected area. The season in which a drought occurs also determines how exposed the vulnerable groups will be.

7. Capabilities or resources that exist to manage the risk

Collaboration

Currently the DoA in collaboration with Agri Western Cape supports struggling farmers with drought schemes and animal feed donations. The relevant local municipality's disaster risk manager and the DoA's sustainable resource manager (usually Landcare) assists the DoA in this regard. These drought schemes can only be in a payment form to the farmer's local cooperation and the farmer needs to apply with all relevant original documents to the DoA. In addition, to qualify for financial support the farmer will have to make a financial contribution to the drought scheme.

In order to manage the drought crisis, a systematic approach was required. The first approach was to identify all possible available resources, and the measures needed to utilise these resources, as well as all possible water management solutions. The following options were investigated for implementation:

- Monitoring of users and flow control devices;
- Additional measures;
- Water Demand Management options;

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- Water re-use – on site and bulk;
- Conventional resources and indirect re-use of effluent;
- Catchment management; and
- Ground water public awareness.

During the identification of emergency projects the following must be considered:

- Does the project address the immediate emergency need to mitigate the disaster situation;
- The project must be implemented in time to prevent economic and social collapse;
- The project must be sustainable in the long term; and
- A project must be in accordance with long term planning for augmentation of raw water resources to sustain growth and development.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

There is a general decrease in precipitation across all seasons of the Western Cape Province with the highest impact expected during early to mid-winter. These changes are likely to lead to an associated decrease in water availability. Specific areas that are at risk to these changes include the Langkloof (where new fruit orchards are continuously planted) and Haarlem.

Simultaneous outbreaks of animal disease during periods of drought will affect the farming community.

The changing rainfall patterns have a huge impact on agriculture and will eventually impact the tourism industry.

Droughts' duration and their intensity have generally increased. While regional droughts have occurred in the past, the widespread spatial extent of current droughts is broadly consistent with expected changes in the hydrologic cycle under warming. Current IPCC projections of rising temperatures and sea levels, and increased intensity of droughts and storms suggest that substantial population displacements will take place within the next 30 to 50 years, particularly in coastal zones.

Globally, very dry areas (defined as land areas with a Palmer Drought Severity Index (PDSI) of less than -3.0) more than doubled (from 12% to 30%) since the 1970s, with a large jump in the early 1980s due to an ENSO-related precipitation decrease over land, and subsequent increases primarily due to surface warming.

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

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current farming practices. Lower rainfall levels, increased temperatures and evaporation rates will lead to an increase in the water requirement for irrigation as well as urban garden watering, which will exacerbate the water shortages. With extended drought periods, agricultural production may be affected. Limited supplies will have to be shared over the whole population and thus the possibility of a famine occurring in certain areas exists.

Climate change predictions are that rainfall will be more infrequent but more intense. This will shrink the country's arable land and increase agricultural unpredictability. Farmers will find it increasingly difficult to increase productivity to meet the growing demand for food. This highlights the need for sound cropping and rangeland production practices to retain soil integrity despite the predicted intense rainfall events.

Invasive alien vegetation has a major impact on water – using more than twice the water of indigenous vegetation in some areas. Invasive alien vegetation is estimated to consume about 3 billion liters of water a year in South Africa. This is the equivalent of 26 large dams or 7% of total supply.

Drought increases the probability of fires breaking out. Higher temperatures usually accompany the drying of the soil and lower water levels. As heat and dry climate conditions continue, the risk of fire increases.

The remaining farms have generally increased their irrigation, fuel, fertiliser, mechanization and genetically modified seed inputs. In many cases, advisory services provided by fertiliser companies and agribusinesses have entered the vacuum of the under-resourced government extension service. Poorly managed intensive farming such as the dependence and overuse of synthetic fertilisers, pesticides and herbicides reduces long-term soil fertility, causes soil erosion, pollutes water supplies, poisons fragile ecosystems, exposes farmers and farm workers to toxins, and contributes to climate change through greenhouse gas emissions. The cumulative impact of these factors degrades farmlands and their vital catchment areas. As a result, the long-term productivity declines and these areas become more vulnerable to climate change. Intensified agriculture often also means increased mechanization, which in turn means fewer jobs on farms.

Risk decreasing

Invasive alien plants consume huge amounts of underground water. This can lead to water shortages for human consumption. Programmes such as Working for Water have had a positive impact on the perception of alien plants as a continued threat to biodiversity. Alien plant infested areas that have transformed or degraded the natural buffer area of a wetland or river and these areas are a focus for rehabilitation rather than the intensification of land use.

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There is significant scope for increased underground storage through managed artificial aquifer recharge, which DWA is promoting as an integral part of water resource planning and catchment management. While not all aquifers are suitable, in appropriate areas artificial recharge costs a fraction of other storage options, and can be implemented incrementally thus saving on initial capital outlays. The potential for increased use of groundwater and underground storage heightens the importance of minimizing water contamination, from mining, industrial, agricultural and domestic sources.

The organic (chemical free) industry is the fastest-growing industry segment worldwide. And it will help to ensure a healthy agricultural industry that contributes to the country's Gross Domestic Product (GDP), food security, social welfare, job creation and ecotourism, while adding value to raw materials. But the health of the agricultural sector depends on the sustainability of farming methods; and the implementation of soil-moisture conservation practices.

9. Impact the risk has on the development progress in the areas, communities and households it affects

Economic	Environmental	Social
• Reduced business with retailers; • Food and energy shortages; • Loss of crops for food and income; • Reduction of livestock quality; • Water scarcity; • Loss of jobs, income and property; • Less income from tourism and recreation; • Forced financial loans; and • Lasting drought could lead to replanting, which is often expensive. E.g. it can have a significant adverse impact on production (particularly with • water-intensive manufacturing processes), up to the point of shutting down.	• Increased damage to natural habitats; • Reduced crop, and range land productivity; • Reduced water levels and quality; • Reduced cloud cover; • Increased daytime temperature; • More dust and sandstorms; • Decreased soil productivity; and • Decreased water resources.	• Disrupted distribution of water resources; • Reduced grazing quality and crop yields; • Employment lay-offs; • Increased food insecurity; • Increased pollutant concentrations; • Inequitable drought relief; • Increase in wildland fires; and • Increased urbanization.

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10. Secondary impacts within areas and communities affected by the risk

Economic	Environmental	Social
• Increased prices for farming commodities; • Drastic price increases; • Expensive; - imports/substitutes; • Increased expense of buying food, loss of income; • Sale of livestock at reduced market price; • Increased transport costs; • Deepening poverty; • Increased unemployment; • Increased debt; and • Increased credit risk for financial institutions.	• Loss of biodiversity; • Lower accessibility to water; • Increased fire hazard; • Crop withering and dying; • Increased top soil erosion; • Increased air pollution; • Lack of water for feeding and drinking; and • A change in rainfall patterns, more frequent droughts due to climate change and significant land degradation may, over time, lead to the development of areas of desertification.	• Increase of energy consumption for irrigation and crop spraying systems; • Sale of livestock, household and community assets to purchase food; • Conflict between water users; • Increase in unemployment; • Malnutrition and famine; • Potential for population migration; • Displacement of communities; and • Water resources will have to be managed carefully; it is likely that water restrictions will be applied.

CRITICAL INFRASTRUCTURE

DAM FAILURE

A dam is generally an earth or masonry barrier built across a stream or river to obstruct the flow of water and thereby creating a reservoir, lake or impoundment. Dams are water storage, control or diversion structures that impound water upstream in reservoirs. Dam failure can take several forms, including a collapse of, or breach in, the structure.

While most dams have storage volumes small enough that failures have few or no repercussions, dams storing large amounts can cause significant flooding downstream. The term 'dam' in this document includes any catchment or barrier dam or any other form of impoundment used for the storage of water or other liquid.

Normally dam failures can be attributed to the following conditions:

- Prolonged periods of rainfall and flooding, which cause most failures;
- Inadequate spillway capacity, resulting in excess overtopping of the embankment;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, or maintain gates, valves, and other operational components;
- Improper design or use of improper construction materials;
- Haphazard inspection and maintenance programs;
- Failure of upstream dams in the same drainage basin;
- Landslides into reservoirs, which cause surges that result in overtopping;
- High winds, which can cause significant wave action and result in substantial erosion; and
- Earthquakes, which typically cause longitudinal cracks at the tops of the embankments, leading to structural failure.

1. Early Warning Signals

The key to a successful dam safety monitoring or early warning system is the advanced detection of a developing condition of concern. Early detection of a developing condition allows time to properly evaluate the on-going safety of the dam and to take corrective action, if necessary. Dams require on-going maintenance, monitoring, safety inspections, and sometimes even rehabilitation to continue safe service. Unusual conditions or early warning signs include:

- Instability indicated by cracks, slips, sags and bulges in the slopes and/or movements in the crest of the dam and reservoir basin slope should be noted and new seepage water discharge points observed on a weekly basis (during floods). The location and dimensions of movement or seepage should be determined, photographed and pegged to mark the position;
- The occurrence and slow development of any of the following at the dam surface should be inspected on a daily basis:
 - Turbid seepage water (during floods);
 - Transverse and longitudinal cracks with opening widths larger than 5mm, or cracks longer than 1 m;

DAM FAILURE

- Observable displacement across a longitudinal crack;
- Ground movement of more than 100mm between two inspections;
- Concentrated settlement less than 25m² in area;
- Extreme inflow;
- Poor maintenance, especially of outlet pipes;
- Geological instability caused by changes to water levels during filling or poor surveying;
- Sub-standard construction materials/techniques;
- Settlement of the dam crest below the design level; and
- Concentrated seepage discharges at new locations with flows larger than 0.2 l/s (during floods).

2. Hazard Frequency

Dam failures are comparatively rare, but can cause immense damage and loss of life when they occur.

In this regard the following should be noted:

- High risk periods for dam failure is normally during the winter (May to August) as well as during out of season deluges when dams fill up quickly; and
- It is important to take note that dam failure is not necessarily connected to floods.

There has been a relatively low incidence of the catastrophic dam failures in the EDM.

3. Areas, communities or households most at risk

- The greatest threat from dam failure is to people and property in areas immediately below the dam since flood discharges decrease as the flood wave moves downstream.
- The vulnerability of property and population downstream of dams is related to construction in inundation areas.

4. Likely impacts of hazards

Economic	Environmental	Social
- Roads get washed away; - Damage to farm buildings and agricultural land; - Impact on the water purification and sewage systems; and - Damage to property and water pumps.	- Inundation; - Lack of water supply to affected areas.	- Harm to the public; - Disruption of health services; - Loss of life; and - Disruption of educational programmes.

5. Level of risk for different situations and conditions (seasonality)

The level of risk depends on whether the dam is downstream and whether it occurs during a flood year. The location of the dam in relation to where it is fed from is also important; and location of the dam in relation to development.

DAM FAILURE

6. Conditions of vulnerability that increase the severity of the hazard

Technological

- Sub-standard construction materials/techniques;
- Unserviceability of spillways and floodgates;
- Unserviceability of outlet works required for lowering of the water-level in an emergency;
- Unusual seepage/leaks which occur in the course of time or which remove material;
- Defects in the dam wall or its components, which could lead to the failure of the dam;
- Deterioration of the dam wall or the forming of cracks, including the starting of new cracks or the lengthening or widening of existing cracks;
- The movement of material masses near the perimeter of the reservoir;
- Abnormal instrument readings; and
- Significant damage to slope protection.

Socio-economic

- Unregistered dams. Personal finances and apathy on the part of some dam owners continue to be the most common stumbling blocks hampering progress with regard to the rectification of deficiencies at dams;
- The cumbersome process of receiving financial aid from National Treasury through the DoA's application process causes already damaged dams to be exceptionally vulnerable to additional hazards such as hailstorms, floods and droughts. In some cases dams were temporarily restored by farmers but in the majority of cases farmers were unable to afford to repair damaged dams caused by floods.

7. Capabilities or resources that exist to manage the risk

Collaboration

- Good collaboration exists between stakeholders in the Western Cape Province: DWA; SAWS; WCDM and Eden DMC to warn dam schemes that they can expect a high rainfall.

Department of Water and Sanitation and the Dam Safety Office

- DWA is responsible for the maintenance and management of dams in the Western Cape. This includes monitoring the measures and flow of river systems;
- The hydrological safety of large dams is one of the more complex issues in design. The designer must create a flood passage design that caters for "small" events as well as for large, potentially

DAM FAILURE

damaging events;

Legislation

Legislation governing dams in South Africa:

- National Water(Act 36 of 1998);
- Dam Safety Regulations (Government Notice R. 139 of 24 February 2012); and
- Dam Safety Regulations (Government Notice R. 138 of 24 February 2012).
- Legal requirement for Emergency plans and procedures to be developed.
- Legal requirement for dam safety programs and inspection.

8. Risk increasing or decreasing in the KLM

Risk increasing:

- Increased risk of dam breaks due to increasing rainfall that leads to floods and inundation;
- Internal (piping) erosion;
- Slope failure;
- Ladismith Jan F Le Grange dam- eminent danger
- Seismic event (earthquake); and
- A lack of maintenance from the local municipality's side.

9. Impact the risk has on the development progress in the areas, communities and households it affects

Without consideration of dam failure during the subdivision permitting process, future development could place residences and businesses in high hazard areas.

- Affect travelling to schools, work etc.;
- Possible displacement of certain households;
- Impact on the fishing industry; and
- The energy of the water stored behind the dam is capable of causing rapid and unexpected flooding downstream, resulting in loss of life and great property damage

10. Secondary impacts within areas and communities affected by the risk

Reconstruction of the dam walls and damaged pathways can take a considerable amount of time and local resources which will then impact on affected areas and communities' time to recuperate.

DISRUPTION: SEWAGE AND DRAINAGE

1. Early Warning Signals

- Landfill sites;
- An increase in blockages of sewage systems and an increase in complaints ranging from broken sewage lids, faulty prepaid meters, leakages etc.;
- Public open spaces, parks and cemeteries are often abused as dumping sites, compounding the challenges of community services, cleaning services and law enforcement;
- Increase in fly and rodent activities; and
- Bad odours and complaints of smells in area.

2. Hazard frequency

Occurs almost daily. Fats, oils, grease and food waste cause major problems in drains and sewers. When disposed of down kitchen sinks, toilets or drains, this waste congeals to form blockages which can lead to flooding and pollution. When these products enter the drainage systems that carry roof water from homes and surface water from drives or pathways, they can directly pollute streams and rivers.

The management of the hazard is related to the following factors:

- Equipment management (Transport and machinery);
- Staff management;
- Operations management.

Should one of the above factors be negatively influenced for any reason, the service will be disrupted. In this regard lack of funds for equipment, labour actions and contractor's under-performing plays a major role in the frequency of service disruptions.

3. Areas, communities or households most at risk

- Communities that experience more problems are located in informal settlements where the density and demands are higher. This affects the function of the infrastructure due to the high density of households and not because of the quality of the infrastructure
- Rivers and water bodies in close proximity of treatment plants;
- Communities living adjacent to water bodies; and
- People participating in aquatic sports;
- The declining state of municipal wastewater and sewage treatment infrastructure in South Africa is one of the largest contributing factors to the numerous pollution problems experienced in most parts of the country and a major contributor to health problems in poor communities.

DISRUPTION: SEWAGE AND DRAINAGE

4. Likely impacts of hazard

Organic pollution occurs when an excess of organic matter, such as manure or sewage, enters the water. When organic matter increases in a pond, the number of decomposers will increase. This leads to a depletion of oxygen as the decomposition process occurs. A lack of oxygen can kill aquatic organisms.

- Environmental health problems;
- Increase in rodent, fly and other insects infestations;
- Spread and increase in human diseases;
- Development of unhygienic conditions at food handling premises;
- Hazardous medical waste accumulation at hospital/medical premises;
- General deterioration of residential and environmental conditions;
- Bad smells and odours;
- Unauthorized and indiscriminate dumping of waste;
- Pollution of soil, rivers and other water sources; and
- Illegal dumping impacts on proper drainage of run-off by blocking sewer systems and drainage basins which can result in flooding.

5. Level of risk for different situations and conditions (seasonality)

- During winter rainfall seasons the Stormwater system gets rapidly overloaded.
- During heavy rains, illegal dumping can leach hazardous chemicals into waterways and potentially block drainage ways, making areas more susceptible to flooding.
- When the systems are poorly maintained it overflows during the rainy season.
- Risk at food handling premises and medical facilities can be high under all circumstances.

6. Conditions of vulnerability that increase the severity of the hazard

Pollution

Waste disposal facilities are potentially sources of both air and water pollution, respectively through the generation of methane and leachate.

Agricultural risks

The pesticides and herbicides that landowners make use of can pollute the water and air; and agricultural communities do not make use of communal dumpsites. Consequently they discard of rubbish in the 'klowe' or by burning it. This poses an environmental risk to the surrounding area and it contributes to carbon pollution when it is burnt.

DISRUPTION: SEWAGE AND DRAINAGE

Illegal dumping

The illegal burning at landfill sites is not properly monitored. It is important that all landfill sites in the Eden region get permitted to provide a means of effective control and a set of conditions which will ensure that permit holders will operate, close and monitor waste disposal according to the minimum requirements.

- The uncontrollable and/or illegal dumping of refuse as well as the insufficient and irregular removal of refuse at refuse disposal areas within some residential areas of the region are one of the biggest nuisances in communities;
- Illegal dump sites attracts pest such as insects, rats, birds, flies and fleas who carry illnesses that can be transferred to the community; and
- Methane emissions from waste disposal sites.

Resource shortages

- Industrial action by workers;
- Equipment malfunctioning;
- Limited access to disposal sites;
- The high costs associated with the transportation of waste;
- There is a lack of skills and capacity at the local municipality level in the area of waste management and specifically waste minimisation, recycling and re-use;
- Waste is not seen as a resource. There is a general need to change the culture of littering;
- Lack of landfill space (insufficient planning). Saving landfill and transport cost by diverting waste from landfill introducing conversion technologies which include minimization of waste. To as far as possible utilise the potential energy in the waste water treatment plans as a source of electricity supply;
- Lack of qualified technicians for their operations and maintenance programme is also a challenge hence most of the infrastructure is poorly maintained; and
- Upgrading of existing Landfill Facilities to comply with legislation and to ensure a healthy environment.

7. Capabilities or resources that exist to manage the risk

District responsibilities

- The EDM has already identified 5 suitable regional landfill sites that will be able to service B-

DISRUPTION: SEWAGE AND DRAINAGE

municipalities within their boundaries;

- Municipalities who operate waste disposal facilities that may impact the coastal environment must take measures to prevent pollution and environmental degradation thereof, particularly with respect to water;
- Service level agreements with private companies and contractors to ensure business continuity for waste removal;
- Recycling of waste including paper, plastics, glass, tins and tyres makes sense both from an environmental and from an economic standpoint. It means efficient use of the raw material, a reduction in waste and energy savings. It also plays its part in reducing greenhouse gas emissions generated in landfills. The strategy of separation at source where those who create the waste, whether households or businesses, separate it into various recyclable groups such as glass and paper, allows easier collection and sorting at waste depots, and ensuring the various types of waste are not contaminated by each other;
- In accordance with the National Waste Act, 2008 (Act No. 59 of 2008) the Kannaland Local Municipality has a Draft Integrated Waste Management Plan (IWMP) in place;
- Eden is already in the process to address the need for regional landfill facilities and has already started to investigate the possibility to introduce conversion technologies in the district and to minimize waste at the point of generation. With the revision of the first generation Integrated Waste Management Plans the rest of the challenges will be address over the next five years;
- To source funding for a status quo report and future needs for sanitation backlog in both rural and urban areas and it be GIS linked. (Includes infrastructure and sanitation units);
- A district bulk sanitation master plan was drafted in June 2011, but implementation is lagging due to shortage of funds.

Legislation

- All Waste Water Treatment Plants, are operated under the specific conditions in the National Water Act of 1998 (Act No. 36 of 1998, Government Notice No 1191) in accordance with the Permit requirements of Department of Water Affairs and Forestry;
- The Kannalnd LM is responsible to ensure the correct implementation of NEMA, the Air Quality Act, the National Water Act, the Health Act, the Municipal Health By-law;
- In accordance with the National Waste Act of 2008 (Act No. 59 of 2008) the Kannaland LM has a first generation Integrated Waste Management Plan (IWMP) in place; and
- All of the municipalities were assessed during the 2010/11 Green Drop Certification. The Green Drop results outline the quality of waste water treatment in municipalities based on rigorous assessments done of each water treatment facility. In the Kannaland LM Green Drop status in 2011

DISRUPTION: SEWAGE AND DRAINAGE

was 49.1%. However, this has since improved to 50.27% as of the 2013 waste water treatment system audit.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

- In certain cases the aging wastewater and sewage treatment infrastructure against rapidly growing needs has led to the upgrading and improved operations at certain plants;
- In other cases it will require significant financial commitments and the situation may deteriorate rapidly if these financial provisions are not accelerated;
- The use of septic tanks and conservancy tanks must be monitored closely, especially regarding influence on river and groundwater pollution;
- Due to the lack of land generally for the disposal of waste the risk related to refuse removal and disposal is increasing;
- The high cost of equipment for removal and disposal of waste also increases the risk of service disruptions; and
- The trend to use contractors for waste removal services also complicates the management of the service and therefore increases the risk of service disruptions.

Risk decreasing

- See Section 7;
- Refuse removal services by local authority/private company is the leading source of refuse removal for households for all districts in the Western Cape. Refuse removal is mainly be delivered by municipalities themselves unless it is being outsourced to a private company. According to the Census 2011 results, the Municipality provides refuse to 66.1% of its community compared to 59.2% in 2011.

9. Impact the risk has on the development progress in the areas, communities and households it affects

In planning development the design and capacity of existing and new treatment plants must provide sufficient capacity to treat the existing volume of wastewater and sewage effluents as well as consider the possibility of population growth in the near future. If these demands for the treatment of waste water cannot be met, development should not be approved.

- The health and safety hazards associated with illegal dumping are not limited to environmental pollution. Dumping also creates physical and chemical hazards;
- Pests such as mosquitoes, rats and mice living in debris can carry diseases; and

DISRUPTION: SEWAGE AND DRAINAGE

- Fires, sharp objects, and hazardous waste pose a threat to anyone that may be working near the dump site, or to children who may play in or near the debris.

10. Secondary impacts within areas and communities affected by the risk

- Environmental degradation;
- Poor ground water quality;
- Untreated wastewater can spread disease; and
- Contaminate agricultural crops.

DISRUPTION: WATER SUPPLY

Access to potable water and sanitation is essential to maintain a healthy lifestyle. The Kannaland Municipality is the Water Service Authority responsible for water services and waste water services in Ladismith, Zoar, Van Wyksdorp and Calitzdorp. Basic services are rendered to rural areas when required. The municipality has identified the need for long term water and waste water security investigation for Zoar, Calitzdorp, Van Wyksdorp and Ladismith.

All households have access to basic water services which means that water is available within 200 meters from their dwellings/houses. All the houses in the urban areas of Kannaland Municipality are provided with individual water connections. Stand pipes are provided in the informal areas as a temporary emergency service. Tanker water services are provided for rural schools and rural communities on request (2016/17 Draft Reviewed IDP).

1. Early Warning Signals

The main factors contributing to the deterioration of water quality in South Africa are:

- Salinization;
- Eutrophication;
- Disease-causing micro-organisms; and
- Acidification.

Early warning signals include:

- Inadequate access to safe drinking water;
- Inadequate access to water for sanitation and waste disposal;

DISRUPTION: WATER SUPPLY

- Groundwater over abstraction (excessive use) leading to diminished agricultural yields;
- Overuse and pollution of water resources harming biodiversity; and
- Regional conflicts over scarce water resources sometimes resulting in warfare.

2. Hazard frequency

During summer Kannaland LM experiences an increase in the water demand which puts pressure on the available supply.

3. Areas, communities or households most at risk

It should be noted that water conservation remains one of the critical elements for all types of development, including ensuring sustainable tourism and agricultural practice. It has been proven that a lack of sufficient water supply has constraining effects on the creation of sustainable economic growth and development path. With the large number of indigent households in the region, it may be necessary to consider a fairly significant indigent policy that does not add to the poverty trap.

- Commerce and industry reliant on water ;
- Hospitals and frail-care facilities;
- Agricultural sector;
- Hospitality and accommodation industry;
- Communities living adjacent to water bodies;
- Pumpstations located in low-lying areas; and
- People participating in aquatic sports.

4. Likely impacts of hazard

- Environmental health problems;
- Dehydration;
- Untreated or inadequately treated municipal sewage is a major source of groundwater and surface water pollution in the developing countries;
- Water-borne diseases and water-caused health problems are mostly due to inadequate and incompetent management of water resources;
- Ground water can be contaminated;
- Water pollution can also significantly increase the rate of algal blooms in water bodies;
- The main problem caused by water pollution is that it kills life that inhabits water-based ecosystems;
- Ecosystems can be severely changed or destroyed by water pollution;
- Organic pollution occurs when an excess of organic matter, such as manure or sewage, enters the water. When organic matter increases in a pond, the number of decomposers will increase. This

DISRUPTION: WATER SUPPLY

leads to a depletion of oxygen as the decomposition process occurs. A lack of oxygen can kill aquatic organisms;

- Negative effects on fish and wildlife populations;
- Beach closures and other restrictions on recreational water use; and
- Restrictions on fish and shellfish harvesting and consumption.

5. Level of risk for different situations and conditions (seasonality)

During the summer there is a marked increase in water usage and the possibility of exceeding the capacity of certain treatment plants. This can be attributed to the increase in temperature, tourists and holiday goers over December/January.

6. Conditions of vulnerability that increase the severity of the hazard

Drought/ Decrease in annual rainfall

As a result of decreased rainfall, all resources, especially surface water resources, are under pressure and will have lower safe yields. In some places a water allocation deficit already occurs, implying that the demand is being met out of the ecological reserve, or from groundwater reserves beyond the natural recharge rate. Due to increased heat the units of water demanded from agriculture, as well as from towns will rise sharply.

Even in the event that average annual rainfalls would not reduce much, it is anticipated that much greater variability of rainfall will occur within a year and also between years due to more extreme climatic conditions.

Other conditions that increase the severity of the hazard are the following:

- Obsolete infrastructure, pipe breakages, leaking (water loss);
- The recent droughts has highlighted the weakness by dependence on surface water only;
- The large low-income and indigent population stresses available capital and operation funding and the Municipality depends on grants from higher levels of government to supply services to this section of the population;
- Rapid urban growth associated with internal migration, expansion of services related to tourism and retirement, as well as free basic service provision;
- Funding to maintain the water infrastructure assets, some of the infrastructure needs repair/replacement;
- Water supply is limited – rivers have small catchment areas;
- Pollution of rivers and other water storage facilities through aerial crop spraying activities; and

DISRUPTION: WATER SUPPLY

- Alien infestation in many areas impairs natural beauty and reduces water supply.

7. Capabilities or resources that exist to manage the risk

- Public, media and business awareness of water related issues has increased exponentially since the turn of the millennium, linked to the increasing attention to climate change;
- Following this public awareness, as well as increased investor interest in water related risk, business is becoming more engaged in water management issues to manage their physical, reputational and regulatory risk;
- Kannaland Water Service Development Plan.

Department of Water Sanitation

Effective disaster risk reduction and management is currently being implemented through effective day-to-day line function activities of DWS staff in the Regional Office. In the case of water resource management the areas of jurisdiction are based on watersheds, while in the case of water services the areas of jurisdiction are based on municipal boundaries. Water services are the responsibility of water services authorities, which could be local, district or metro municipalities. DWS has oversight responsibilities in respect of water services while water resource management is the DWS direct responsibility in terms of the South African Constitution.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

Water is increasingly being recognised by the public, media and business as a critical resource to support social well-being and economic development. Rapid urban growth and economic development are recognised drivers of increased water consumption therefore it must be accepted that the risk of water shortage will have to be managed in a sustained manner. Climate variability experienced at this stage will also increase the risk.

Risk decreasing

- Well-structured water restrictions and emergency tariffs had a positive impact on reducing water consumption;
- The importance of more accurate metering of all users to monitor individual consumption was implemented;
- DWS is required to monitor boreholes and extractions, maintain a register of boreholes, provide guidelines and implement disaster situation groundwater management guidelines; and
- Effective inter-governmental co-operation is possible as there are no sustainable 'quick fixes' – an

DISRUPTION: WATER SUPPLY

integrated long-term approach must be followed. Stakeholder participation and support is important and enough time must be allowed for it.

9. Impact the risk has on the development progress in the areas, communities and households it affects

Rapid urban growth associated with internal migration, expansion of services related to tourism and retirement, as well as free basic service provision are all factors that will have to be observed in the development planning process. In this regard the provision of potable water in the development process will have to be considered in detail. Existing agricultural production is also likely to face increasing climate and water related challenges and supply and demand need to be properly analysed and balanced going into the future.

10. Secondary impacts within areas and communities affected by the risk

- Deepening poverty;
- Environmental degradation;
- Poor ground water quality;
- Untreated wastewater can spread disease;
- Contaminate agricultural crops;
- Migration;
- Conflict,
- Falling employment in unskilled and semi-skilled occupational categories; and
- Negative socio-economic impact on affected communities must not be underestimated.

DISRUPTION: ELECTRICITY SUPPLY

Bulk Electricity

Eskom is the electricity provider in the Eden district. Electricity in South Africa is likely to outstrip supply and electricity will become increasingly unreliable and expensive. The provision of sustainable and affordable electrical services is one of the corner stones of any vibrant economy.

The main energy source of households in the Municipality is the usage of electricity. The Kannaland Municipality is responsible for the provision of electricity to Ladismith and Calitzdorp, whilst Zoar and Van Wyksdorp are supplied by ESKOM. Kannaland infrastructure is outdated and in need of urgent

DISRUPTION: ELECTRICITY SUPPLY

upgrade. The municipality has over the past four years invested in new infrastructure to ensure secured electricity distribution to businesses and the Community.

Below is the main focus areas were addressed:

- the completion of a substation in Calitzdorp
- completion of streetlights for Zoar and Calitzdorp
- completion of high mass lights in Protea Park Zoar
- initiated of the meter replacement program

1. Early Warning Signals

Under unusual power supply circumstances warning messages are broadcasted via the media of expected power outages in high risk areas; and power failures under normal circumstances may be an indication of high load demands.

Notification from the energy supplier Eskom / Municipality is only received intermittently via sms/ e-mail by stakeholders and big clients and pressure exerted includes population growth, an increase in consumerism and economic growth.

2. Hazard frequency

Power outages in Kannaland LM happen quite frequently in certain areas and this is expected to increase during the winter months as the demand increases.

Seldom power outages are also caused by storm winds which are sometimes impossible to predict.

3. Areas, communities or households most at risk

Areas affected include the following:

- The areas mostly affected by unplanned outages are the rural areas where overhead line systems are exposed to storms and lightning;
- Abattoirs and businesses with no generators;
- Commerce and industry reliant on electricity as an energy source; and
- Hospitals and frail-care facilities.

4. Likely impacts of hazard

- Communities may be cut off from society;
- Electricity users throughout the Western Cape can be affected seeing as the Droërivier substation, situated in the Central Karoo DM, supplies the Western Cape Province with electricity;
- The loss of revenue and customers during downtime;

DISRUPTION: ELECTRICITY SUPPLY

- Failure of pumps and pump stations serving reservoirs and wastewater treatment works;
- Failure to complete contracts on time; and
- An increase in overhead and unanticipated loss of productivity.

5. Level of risk for different situations and conditions (seasonality)

- Very cold periods;
- Very warm periods;
- Periods of severe weather (wind and rain);
- High power usage periods daily (06:00 to 09:00 and 17:00 to 20:00 daily); and
- Holiday season when there is a significant increase in the population in the area.

6. Conditions of vulnerability that increase the severity of the hazard

Climate change

The evidence of man-made greenhouse gas emissions being linked to climate change has been accepted as compelling and convincing by mainstream institutions. This exposes South African energy-intensive exports (aluminum, ferrochrome) to the risk of protectionist tariffs in markets subject to green legislation. South Africa is the 12th largest CO₂ emitter on the planet, but only the 30th largest economy. This is due, firstly, to the energy intensity of the economy and, secondly, to the fact that South Africa is overwhelmingly dependent on coal for energy, compared to other fuels:

- 87.2% of electricity generation capacity by Eskom is based on coal-fired stations; and
- 30% of liquid fuel is made from coal by Sasol using the Fischer-Tropsch process, making the Sasol Secunda plant the biggest single point source of CO₂ on the planet.

Resource shortages

- A huge gap that exists is that the electricity department of local municipalities does not receive access to the Municipal Infrastructure Grant (MIG) which places additional strain on municipal resources;
- A lack of funding for renewable energy sources;
- Power stations are running at full capacity;
- Lack of trained personnel. The concern here is an older generation of employees with institutional knowledge nearing retirement age, but no one trained or skilled enough to take over their tasks;
- A number of generation units are in 'mid-life' requiring major planned maintenance and refurbishment;
- Failure of switchgear on the national network;

DISRUPTION: ELECTRICITY SUPPLY

- Fire under a power line;
- Tripped transformers in the distribution network;
- Defects at power stations;
- Power station maintenance outages; and
- Cable theft.

7. Capabilities or resources that exist to manage the risk

The master plan has not been developed as yet; it is planned for the 2016/17 financial year. Once completed it should accommodate for the future growth of Kannaland LM.

- Demand management plan for electricity ;
- Power consumption monitoring is being done by bulk suppliers;
- Change of behaviour of electricity users;
- Since the cost of Eskom supply is ever increasing and the reliability is decreasing, it is important to investigate alternative energy sources, such as wind, solar or tidal power.

Monitoring and evaluation

- Kannaland LM is responsible to submit an annual report to the National Energy Regulator of South Africa (NERSA). So power consumption monitoring is being done by bulk suppliers;
- EDM has established a District Renewable Energy Forum to discuss alternative energy sources for the district;
- Routine maintenance and replacement of lines are conducted; and
- Eskom in the Kannaland LM has a good working relationship with the relevant role-players. Household access to electricity equates to an average of 93.4 per cent across the Western Cape, with Eden District providing 82.6 % of its households with having access to electricity in 2011; even though only 72.7 % of the households had access to electricity in 2001.

Renewable Energy: Nationally

In South Africa, national government, together with NERSA and ESKOM have encouraged the utilisation of renewable energy projects through national policy and strategic planning initiatives. The objective is to expand electricity generation capacity in South Africa and promote the practice of sustainable development. The Integrated Resource Plan (IRP) for South Africa was released by government in 2010 and proposes to develop 17 800 MW of renewable capacity by 2030 from sources such as biofuels, wind and solar. The IRP sets the target of 3 725 MW of renewable energy to be produced by independent power producers (IPPs) by 2016.

DISRUPTION: ELECTRICITY SUPPLY

In 2011 Cabinet approved the IRP, which sets out a diversification of sources of fuel by 2030. It also stipulates that the future power mix will derive 6% from pumped storage for peak supply and 12% from base-load imported hydropower.

Renewable Energy: Western Cape Province

The Western Cape Government has recognised the need for a more sustainable energy sector, and in September 2010, the Western Cape Department of Environmental Affairs and Development Planning (DEADP) published a White Paper on Sustainable Energy for the Western Cape Province. The 2014 Sustainable Energy Vision for the Western Cape is presented as.

By 2014, 15% of all electricity must be from renewable sources, and a 20% energy reduction in energy consumption must be achieved in the Western Cape. Similar targets have been set on a national level, as well as for the City of Cape Town. These commitments stimulate a market for companies in the renewable energy resources sector, thereby creating momentum for a transformation of the sector.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

- The high demand for electricity is still a matter of great concern as the province is not adhering to the energy saving techniques that are continuously being emphasised by the Department of Minerals and Energy and Eskom. The supply grid and bulk supply from Eskom has been under pressure in the Eden District as from 2011 ;
- Electricity is readily available to the local residents but irregular blackouts persist. As farming is among the main economic drivers, provision of electricity to local farm dwellers should feature among the priorities for Kannaland LM; and
- The high increase of cable theft and other electrical equipment such as transformers is still a challenge that affects both Eskom and Local Municipalities.

Risk decreasing

- Steel structure and steel mainline that runs through the town areas decreases likelihood of vulnerability and resulting power outages caused by natural hazards;
- Maintenance and asset management are crucial to avoid increases in the number of concurrent fault events that would risk more and larger interruptions to customers' supplies; and
- Renewable energy sources can lead to clean energy production; contribute towards addressing the electricity needs of the region; and offer additional income to farms selected for wind farming

DISRUPTION: ELECTRICITY SUPPLY

or solar energy generation.

9. Impact the risk has on the development progress in the areas, communities and households it affects

- Clients get prioritised in the sense that major businesses or large communities will receive assistance first;
- Renewable energy sources such as wind farms can result in: habitat loss due to infrastructure; potential avifaunal impacts; interference with agricultural activities; and negative impacts on the sense of place of residents linked to the visual intrusiveness;
- The question of capacity to provide additional power for new developments must be carefully considered in the planning stages of all developments. In view of the fact that there is a shortage of capacity and resources to generate power on National level, developments can be seriously affected in this regard;
- Competition for space with the farming activities and potential CBAs;
- Distance to electricity grid; and
- Eskom limitations in terms of feed into the grid.

10. Secondary impacts within areas and communities affected by the risk

- Loss of confidence and credibility of authorities;
- High cost of electricity;
- Increase in unauthorized electrical connections;
- Non-payment of electrical accounts; and
- Loss of income to suppliers of electricity.

TECHNOLOGICAL HAZARDS

TRANSPORT INCIDENTS

ROAD ACCIDENTS

Road accidents are unexpected and unintentional incidents which have the potential for harm occurring through the movement or collision of vessels, vehicles or persons along a road.

Roads facilitate movement of both men and materials anywhere within a country. It helps socio-economic development and brings national integration. It furthermore provides linkages to other modes of transportation like railways, airways and shipping.

An efficient and well established network of roads is desired for promoting trade and commerce in the country and also fulfils the needs of a sound transportation system for sustained economic development.

It is however also a fact that road incidents is the cause of large numbers of deaths and injury in South Africa and has major economic implications for the Country as a whole. The Kannaland LM is no exception to the rule as far as road incidents are concerned.

1. Early Warning signals

- Road or rail traffic signs indicating a high accident zone, speed limitations or level crossings in that area;
- Identified and marked road traffic high accident zones (Red Dot Roads);
- Poor visibility due to smoke and mist;
- Between sunset and sunrise;
- Rainy periods;
- High density traffic periods; and
- Holiday periods.

2. Hazard frequency

- Incidents occur on a daily basis;
- Over long weekends and holiday periods, especially December, however the number of incidents increases markedly;
- During rainy periods the number of incidents increases; and
- In the aggregated risk register the probability of road incidents are rated as tolerable.

3. Areas, communities or households most at risk

- Pedestrians and public transport passengers;
- Road users making use of unprotected crossings;
- Road construction workers and maintenance teams;

ROAD ACCIDENTS

- Emergency services staff.

4. Likely impacts of hazard

- Injury levels vary from slight, serious to fatalities of drivers, passengers and pedestrians;
- Loss of loads/material/equipment transported;
- Loss of production due to traffic disruption and road closures;
- Allocation of emergency resources and staff;
- Negative impact on tourism; and
- Disruption of educational programmes.

5. Level of risk for different situations and conditions (seasonality)

Generally, road accidents and injury/death rates are not the highest in December, January and April. During these months there is a lot of traffic on the roads due to national school holidays, but the increased traffic volumes decreases speed and increases driver alertness. However the influx of tourists, individuals unknown with the area, further increases the high incidence of road accidents during this period. The probability of tyre bursts increases during the hot spring and summer months.

6. Conditions of vulnerability that increase the severity of the hazard

- Conditions of road: sharp bends, poor road surface and visibility;
- Poor driving skills by road users;
- Unlicensed drivers;
- Drivers and pedestrians under the influence;
- Poor and missing road markings;
- Poorly disciplined and uninformed pedestrians;
- Vehicles not being roadworthy;
- Lack of effective road incident management;
- Inadequate law enforcement at all levels, especially after hours; and
- Poor maintenance of farm fences to keep animals off the road reserve.

7. Capabilities or resources that exist to manage the risk

The following are programs and services available to manage the risk:

- The National Road Traffic Management Strategy (RTMS);
- The Arrive Alive Road Safety Campaign was initiated by the National Department of Transport in October 1997 as a Short Term Implementation Plan (STIP) of the 1996 Strategy to improve road user compliance with traffic laws through increased law enforcement and communication;

ROAD ACCIDENTS

- The implementation of the Road Incident Management System can assist with focused training and communication and debriefing with role-players;
- The incident management system can also improve the safety of road incident responders;
- Full implementation of the National Pedestrian Action Plan;
- SANRAL conducts routine inspections of roads which includes cutting grass on the verges;
- Sustained and integrated education and awareness;
- The implementation of traffic, calming measures and speed monitoring are all actions to decrease the high incidence of road accidents; and
- Upgrading, widening and improvement of road surfaces throughout the KLM.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing:

- With the number of road users ever increasing the risk of road incidents also increases;
- The lack and shortage of law enforcers also contribute to the increase of the risk; and
- Staff shortages to cope with the increased demand for emergency services.

Risk decreasing:

- Improved data collection techniques by traffic police to improve validity; and
- High intensity awareness and law enforcement projects in the KLM assist to increase awareness and compliance and a certain amount of success have been recorded in some areas.

9. Impact the risk has on the development progress in the areas, communities and households it affects

In order to reduce the risk of road an integrated approach to traffic management and planning is essential. This includes:

- The planning and construction of new roads/routes in relation to commercial, industrial and residential activities in the district;
- The management of pedestrian flow along existing and new roads;
- Improving visibility along existing and new pedestrian routes;
- Planning pedestrian crossings and footbridges along existing and new roads; and
- Planning traffic calming measures on existing and new routes.

10. Secondary impacts within areas and communities affected by the risk

- High cost for treatment and rehabilitation of injured;
- Loss of income to families of injured and dead;
- Damage to infrastructure;
- Time lost by commerce and industry due to traffic disruption and road closures;

ROAD ACCIDENTS

- High cost of training and deployment of emergency equipment and staff; and
- Poor image of level of road safety awareness in area.

FIRES: VELD FIRES AND STRUCTURAL FIRES

1. Early Warning Signals

Veld Fires

The manner in which fuels ignite and fire spreads is collectively referred to as fire behaviour. To manage fire it is critical to understand fire behaviour and what the variables are that contribute to it:

- Vegetation dryness (moisture content and amount of living vegetation);
- Changes in weather and climate variables that influence fire spread and intensity due to lightning and heat waves (El Niño);
- Availability of combustibles;
- Imbalance in biodiversity caused by alien plant infestation;
- Wind speed caused by Berg winds;
- Long term drought in the dry season;

Structural Fires

- Absence of, or no access to, a satellite early warning system; and
- The early warning for structural fires are normally via reports received from the public, other services in the area and the Law Enforcement agencies deployed in the area.

2. Hazard frequency

Veld Fires

- Veld fires occur during the 'fire season', November to February.
- The frequency would depend on the following:
 - Weather patterns;
 - Sensitivity/alertness to early warning signals; and
 - Local fire regimes.

FIRES: VELD FIRES AND STRUCTURAL FIRES

Structural Fires

- Structural fires can occur at any time of the year, however, fires in the formal sector are much less frequent and therefore have a lower disaster risk than informal structures.
- In certain industrial activities fires can be a constant threat.
- Fires in informal areas poses a constant threat especially during high wind periods.

3. Areas, communities or households most at risk

- The agricultural sector, particularly the pine and wood industry, is largely at risk;
- Road sides and areas at the urban edge are additional areas of risk;
- Plantations), filling stations, LPG gas supply establishments, high buildings, motor vehicle accidents, and hazardous substance emergencies involving motor transport and large structure fires;
- Hotels, guest lodges and holiday resorts, thatched dwellings, wooden houses, sawmills, squatter camp, informal dwellings, institutional buildings and schools;
- Existence of susceptible sub-populations - the very young or pregnant, the elderly, those having pre-existing respiratory and/or decreased lung function or those with a cardiac disease;
- Occupational exposure of outdoor workers such as fire fighters and emergency response workers;
- Any informal settlements adjacent to public open spaces are at risk. Informal structures mostly do not comply with the planned environment or with building regulations, and are typically constructed with corrugated iron sheets, or of any other type of available materials, cladding a wooden frame. The structures are usually located very close together in back yards. They can generally be considered to be a substantial fuel source.
- Other areas include those with illegal electrical connections.

4. Likely impacts of hazard

Economic	Environmental	Social
• Destruction of holiday/weekend resorts; • Loss of pastures requiring expensive replacement by buying fodder; • Loss of fencing; • Loss of farming equipment; • Loss of livestock; • Closure of roads leading to disruption of tourist routes and tourism activities; • Interruption of power supplies on main Eskom line;	• Changes to biodiversity if vegetation is burnt too regularly or if fires burn vegetation completely; • Specie loss or habitat loss if untimed or extreme; • Damage to soil structure; • Loss of water catchment areas; • Air pollution; • Spread of fire-adapted alien invasive plant species; and • Vegetation fires can create	• Loss of livelihood/income; • Increase in poverty; • Increase in crime; • Smoke inhalation; • Damage to infrastructure; • Disruption of road traffic and reduced visibility; and • Injury/death of people and livestock.

FIRES: VELD FIRES AND STRUCTURAL FIRES

- Job losses;
- Increased insurance claims;
- Special arrangements for high risk periods (temporary staff, aerial fire-fighting); and
- High cost of fire prevention and awareness programmes.

elevated levels of gases and particle air pollution over a long period of time through the release of CO₂.

5. Level of risk for different situations and conditions (seasonality)

Veld Fires

- Most fires recorded in the area are in summer and autumn, and the relative prevalence of summer fires has increased in recent times.
- Fynbos fires take place predominantly in summer, or summer and autumn.
- Climate, vegetation and fires are linked as any changes will influence fire spread and intensity and it will result in differences in the prevailing fire regime.
- Changes in fire regimes may threaten plant and animal species.
- DAFF remarks that the fire intensity is linked to the available fuel load of fynbos and/or alien vegetation.
- The prevalence of wind and wind speed, coupled with the last rain event during the fire season influences fire ignition and the spread of fire. In this regard berg-winds pose a high threat in the high situated locations in the area.
- The age of the veldt (when last burned) is also an important factor, the older the higher the risk.
- Lightning also contributes to fires in the high situated locations in the area.

Structural Fires

- In the formal sector fires can also occur during very cold periods (heaters and open fires) or during very warm periods (electrical fans and air conditioners); and
- Informal settlements are at greater risk during the winter months, as a result of increased use of paraffin for heating inside structures.

6. Conditions of vulnerability that increase the severity of the hazard

- Urban edge – vegetation environment / housing characteristics, i.e. inadequate fire-breaks.
- Membership to Fire Protection Associations (FPAs) and level of commitment of landowners.
- Satellite imagery can be used to detect fires; however, in cloudy weather conditions in winter,

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satellite images don't show fires.

- Existence of susceptible sub-populations - the very young or pregnant, the elderly, those having; pre-existing respiratory and/or decreased lung function or those with a cardiac disease.
- Occupational exposure - outdoor workers, fire fighters, emergency response workers.
- A critical issue within informal settlements is the density of the settlement i.e. the higher the density of the settlements and poorer the quality of building materials (higher flammable degree) the greater the risk.
- The influx of people from other areas (Urbanisation) increases the risk of structural fires as these people usually settle themselves as backyard dwellers.
- The close location of structures in backyards increases the risk that the resulting fire can spread rapidly from one dwelling to another.
- It is also a fact that alcohol abuse leads to less awareness and safety with open fires and increases the occurrence of fire incidents.
- Social conflict inevitably leads to arson.
- It is also a fact that alcohol and substance abuse leads to less alertness, awareness and safety with open fires and increases the occurrence of fire incidents.

7. Capabilities or resources that exist to manage the risk

A Provincial fire plan exists in the Western Cape and the Eden District is included in this plan.

The provincial veld fire plan provides the Western Cape Provincial Government and fire management agencies with a consolidated overview of the current arrangements for the management of veld fire and its consequences. The Plan contains an overview of veld and forest fire planning, prevention and response arrangements.

In addition the following capabilities and resources exists:

- The National Veld and Forest Fire Act aims to facilitate an integrated approach to the management of 'veld', forest and mountain fires. It links natural resource management by property owners – collectively or individually to the integrated fire management system.
- A well-established and functional Southern Cape Fire Protection area has been established. It is managed by a management committee with representation from all stakeholders including the KLM and Eden District LMs.
- It operates with an area West which covers the area from George to Hessequa and an Area East which covers from George to Bitou. Each area has its own manager, infrastructure and resources.
- The effectiveness of the FPAs depends on the involvement of landowners (commercial or non-

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commercial farmers) and whether minimum standards are being applied and implemented.

8. Risk increasing or decreasing in the Kannaland LM

Veld Fires

- In general, there is an increase in veld fires due to climate change. This must however be linked to development initiatives in the area.
- Due to structures and resources developed in KLM however and the management of the hazard there is a decrease in the risk.
- Structured, focused and integrated awareness and education programs also contribute to reducing the risk.
- The improved response capacities and co-ordination mechanisms also contribute to limiting the impact of the risk.

Structural Fires

- As areas develop formally and informally the risk of fires increases.
- In areas where formal structures and services are ageing the risk of electrical related fires increases.

9. Impact the risk has on the development progress in the areas, communities and households it affects

- An increase in frequency and distribution of fires will have a serious effect on global warming and land cover change;
- The destruction of infrastructure; and
- Ultimately, loss of life.

10. Secondary impacts within areas and communities affected by the risk

- An increase in frequency and distribution of fires will have a serious effect on global warming and land cover change;
- The destruction of infrastructure and ultimately, loss of life;
- Flooding as a result of burnt vegetation; and
- Erosion and damage to the soil.

SOCIAL – ECONOMIC DISRUPTION

SOCIAL CONFLICT

Social conflict refers to the various types of negative social interaction that may occur within social relationships (e.g. arguments, criticism, hostility, unwanted demands), and may include physical violence.

Simplistically stated it can be seen as conflict arising between the “haves” and the “have nots” of a society i.e. when a labour union argues with management over worker compensation.

The causes of conflict in South Africa are normally related to the following situations;

- Labour disputes/Industrial actions;
- Dissatisfaction with service delivery (Health, Education, Housing and Municipal Services); and
- Xenophobia (Unreasonable fear, distrust, or hatred of strangers, foreigners, or anything perceived as foreign or different).

1. Early Warning Signals

- Sudden demographic changes and population displacement;
- Rising unemployment rates;
- An increase in numbers of demonstrations or rallies;
- Competition between nationals and migrants;
- Organised land invasions; and
- Dissent with regard to new housing developments and allocations in areas.

2. Hazard frequency

- The majority of social conflict experienced in the Western Cape is dissatisfaction with service delivery, labour disputes and Industrial actions.
- In the KLM the incidence of social conflict is relatively speaking low, the potential for such incidents is however high.

3. Areas, communities or households most at risk

- Informal settlement areas;
- Farm labourers residing on farmland;
- Local businesses;
- Agriculture;
- Commerce; and
- Industries.

SOCIAL CONFLICT

4. Likely impacts of hazard

- Disruption of the socio-economic activities of the districted;
- Disruption of educational and essential health programs in affected areas;
- Disruption of seasonal agricultural activities;
- Disruption of essential municipal services; and
- Disruption of transport services and routes.

5. Level of risk for different situations and conditions (seasonality)

- The level of risk for social conflict and industrial action normally increases over periods when wage negotiations take place;
- Bargaining councils consisting of trade unions and employer organisations are the fundamental institutions engaged in the legislative system of collective bargaining and wage determination in South Africa's labour market ; and
- During the period approaching National, Provincial and Municipal elections the risk for service delivery actions increases. The upcoming Local Government elections are likely to result in an increase in service delivery protests.

6. Conditions of vulnerability that increase the severity of the hazard

- Poverty related challenges remain unemployment, HIV and AIDS, high % of illiteracy, food security;
- Inequity and general problems with social grants;
- More than 50% of the population of the total Kannaland LM lives below the poverty line;
- The negative and slowing down of economic activity in the region due to the global recession as well as the property market experiencing more and more pressure resulting in fewer sales;
- Conflict over housing ownership and occupancy;
- Cultural misunderstanding and distrust;
- Unfair labour practices;
- Divided local communities where competition for scarce resources leads to disputes amongst different groupings;
- Absence of institutions effectively integrating the individual into the social decision-making process; and
- Inability of politicians and communities to recognize and communicate early warning signs.

7. Capabilities or resources that exist to manage the risk

- Actively advancing social development in the district is a strategic priority for the Kannaland LM;

SOCIAL CONFLICT

- The Kannaland LM encourages measures to maximise local employment;
- The Thusong Centre provides integrated service and information from government to communities, close to where they live as part of a comprehensive strategy to better their lives; and
- The Community Works Programme (CWP) creates an employment safety-net by providing participants with a minimum level of regular, part-time work.

8. Risk increasing or decreasing in the Kannaland LM

Risk increasing

- Growing rural and urban poverty and unemployment have pushed more people out of their areas in search of a livelihood in urban areas;
- The displacement of poverty from the countryside to the town has led to new forms of survival strategy such as a greatly enlarged informal sector;
- Informal traders or small entrepreneurs are amongst the most enterprising and energetic of contemporary migrants thereby increasing competition and conflict with local traders; and
- An increased demand for better and more basic services in all areas.

Risk decreasing

- While the duration and negative impact of the events appear to be improving with fewer deaths and displaced persons resulting from incidents, the demonstrations are still violent and contradictory to legal requirements;
- Law enforcement, and all involved stakeholders, need to ensure that their role and mandate is clearly defined, evaluated and updated so responsibilities of each role player are known; and
- Recommendations are made following social conflict events and presented at the Western Cape Disaster Management Advisory Forum. This process is not necessarily sustainable on a policy level. It is important that recommendations are not only developed, but also implemented; enforced and evaluated so future social conflict events can be avoided.

9. Impact the risk has on the development progress in the areas, communities and households it affects

- The most important impact development has on social disruption relates to the possibility of raised expectations amongst the local population as well as others choosing to migrate to the area with regards to possibilities of employment;
- The foregoing can discourage developers to invest in the area or set back development opportunities; and
- The haphazard development of informal areas leads to conflict with land owners and complicate

SOCIAL CONFLICT

the planning and provision of essential services.

10. Secondary impacts within areas and communities affected by the risk

- Negative impact on local economic development initiatives;
- Non-functional and fragmented community structures;
- Poor relationships between communities and authorities;
- Scaling down of economic activities and job opportunities;
- Negative impact on tourism and events industries; and
- Negative image of Country.

BIOLOGICAL HAZARDS

HUMAN DISEASES

Good health is vital to achieving and maintaining a high quality of life. A diverse range of factors play a role in ensuring the good health of communities and that disease, especially preventable and communicable ones, are kept at bay. Some of the factors include lifestyle features that also depend on the provision of high quality municipal services, such as clean water and sanitation. It is the function of healthcare services not only to restore bad health, but also to ensure that communities do not contract preventable diseases.

In humans, “disease” is often used more broadly to refer to any condition that causes pain, dysfunction, distress, social problems, or death to the person afflicted, or similar problems for those in contact with the person.

Diseases affect humans in different ways, and they arise from different causes. While some diseases are caused by pathogenic organisms, such as bacteria, others seem to arise spontaneously. Diseases caused by pathogenic organisms are often transmissible from one person to another.

An epidemic is when infection affects or tends to affect a disproportionately large number of individuals within a population, community, or region at the same time.

Although epidemics in the true sense of the word are not a regular occurrence in the EDM there are human diseases that are quite prevalent in the district and KLM.

Hazards Identified:

- HIV /AIDS; and
- TB especially Multi Drug Resistant TB (MDR TB).

1. Early Warning signals

- Early warning signs include presence in the region of the infective agent and vector (agent of transmission).
- Common symptoms of active lung tuberculosis are cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.
- The symptoms of HIV vary depending on the stage of infection. Though people living with HIV tend to be most infectious in the first few months, many are unaware of their status until later stages.
- In the EDM all pregnant women are routinely tested for HIV and rapid plasma regain (RPR) (syphilis).

2. Hazard frequency

- There were an estimated 46254 deaths in the Western Cape in 2009 with deaths in the EDM

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accounting to 4169 deaths ;

- Leading causes of death in the EDM include: HIV/AIDS (13%), Tuberculosis (8.2%), Interpersonal violence (6.9%), Ischaemic heart disease (6.5%), Cerebrovascular disease (5.5%), Transport injuries (4.7%), (4.5%), Trachea/bronchi/lung (4.1%), Lower respiratory infections (4.1%), COPD and Diabetes mellitus (4.1%);
- HIV/AIDS and TB are amongst the top three causes of deaths in the EDM; and
- HIV surveys revealed that in the EDM the rate of HIV (+) amongst pregnant women in the age group 15 – 19 is 3.9% and in the 20 – 24 age group 11.6%. Overall the HIV prevalence figure for EDM increased from 13.8% in 2006 to 14.5% in 2011.

3. Areas, communities or households most at risk

Specific high risk areas or vulnerable communities include:

- Communities in informal settlements are vulnerable specifically to malnutrition and outbreaks of diseases such as typhoid due to their rural profile;
- Pastoralists (emerging farmers, small-scale farmers etc.);
- Rural wage labourers;
- Urban poor people. Poverty is one of the main drivers of HIV/AIDS and TB;
- The highest HIV prevalence estimates remain amongst the age groups of 25 - 34 years; and
- Children, adults and the elderly are all vulnerable to the risk factors that contribute to non-communicable diseases, whether from unhealthy diets, physical inactivity, exposure to tobacco smoke or the effects of the harmful use of alcohol.

4. Likely impacts of hazard

- Illness which place a high demand on Health Services;
- Absenteeism and low productivity which leads to economic losses;
- Death which leads to child headed families with resultant socioeconomic problems; and
- Loss of income which leads to socio-economic decay of communities.

5. Level of risk for different situations and conditions (seasonality)

Changes in mean climatic conditions and climate variability can also affect human health via indirect pathways, particularly via changes in biological and ecological processes that influence infectious disease transmission and food yields.

Summer

Epidemics of other infections (e.g. meningococcal meningitis) tend to flare up during the hot and dry season and subside soon after the beginning of winter.

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Outbreaks of diarrhoea occur mostly during the summer and spreads over the greater Kannaland area.

Disease carrying vectors may adapt to changes in temperature by changing geographical distribution. Due to the change of climate zones an emergence of malaria in the cooler climates of the African highlands may be a result of the mosquito vector shifting habitats to cope with increased ambient air temperatures.

Winter

Patterns of winter mortality and infectious disease with regards to the cyclic influenza outbreaks occur in late autumn, winter and early spring. This disease pattern may result from increased likelihood of transmission due to indirect social or behavioural adaptations to the cold weather such as crowding indoors.

6. Conditions of vulnerability that increase the severity of the hazard

Communicable diseases occur as a result of an interaction of disease-causing agent (pathogen), transmission process and host (usually humans and/or animals). Apart from reliable identification of the specific organism involved in a disaster episode, the following aspects are of crucial importance in judging the risk of specific pathogens to cause an outbreak of disastrous proportions:

- **Infective dose:** number of organisms required to cause infection.
- **Pathogenicity:** the ability of the pathogen to produce disease, measured by the percentage of persons exposed to the pathogen that will develop the disease.
- **Infectivity:** the ability of the pathogen to invade the host.
- **Virulence:** an indication of the severity of the disease.
- **Incubation period:** the time between entry of the pathogen into the host and the appearance of the first sign or symptom of the disease. This can vary from a few hours to weeks or even years.
- **Condition of the host:** persons who are not in good health because they are already burdened by malnutrition, other diseases, poor housing and sanitation, etc. are more susceptible to infection.

HIV renders the infected person's immune system fatally damaged and makes the sufferer more vulnerable to environmental pollution and infections. A large proportion of HIV-positive people in a population affected by disaster may mean that the death toll and the morbidity from primary emergencies as well as the secondary fall-out of such emergencies can be much higher than in a healthy population. Concurrent HIV infection is the biggest risk factor for TB. People who are co-infected with HIV and TB are more likely to become sick with TB.

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Climate Change

Climate change will have an impact on health due to a change in air quality, water supply, food security and disease-carrying vectors which could lead to faster malnutrition and the outbreak of zoonotic diseases.

Facilities and Departmental Risks

The following have been identified as overarching provincial departmental risks which affects service delivery on the local level: Insufficient funds; Failure of supply chain management regarding the procurement of medicines and goods and services, resulting in items being out of stock; Fraud, theft of money and other assets and fraudulent (ghost) appointments; Non-compliance with financial, human resource and other regulations, resulting in irregular expenditure; Inadequate performance management of human resources; Shortage of skilled staff at all levels; Inadequate information, which compromises planning, monitoring and the management of the service; Failure of information technology networks and computer systems; Inadequate health technology and infrastructure to support health services, including capacity deficiencies in the Department of Transport and Public Works; Disasters and outbreaks, for example H1N1 or similar unpredictable outbreaks.

7. Capabilities or resources that exist to manage the risk

Facilities

- The Kannaland LM has access to one District Hospital, two Community Day Centre, 7 Clinics and 2 Mobile facilities.

Programmes

- The primary mandate of the Division: District Health Services is to impact on the burden of disease as experienced by the population of the Kannaland LM. South Africa is committed to the MDGs specifically MDG4: Reduce child mortality; MDG5: Improve maternal health and MDG6: Combat HIV and AIDS, malaria and other diseases. As part of that mandate, and in line with the MDGs, focus is placed on focal key programmes e.g. improving maternal and child health;
- The principle mandate of the HIV/Aids, STIs and TB (HAST) sub-programme is to co-coordinate a provincial response to the HIV and TB epidemics. As such it focuses both on prevention and treatment of these two major infectious diseases that beset the Western Cape. The HAST programme co-ordinated two major national campaigns in 2010/11. An HCT (HIV counselling and testing) campaign and an ART (anti-retroviral therapy) scale-up campaign. A total of 1042095 clients were tested (against a target of 1.1 million) during the HCT campaign that lasted from 1

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April 2010 until 30 June 2011;

- In terms of HIV prevention, the focus areas are the prevention of adult sexual transmission of HIV through management of STIs, barrier contraceptive (condom) distribution and male circumcision, and the prevention of HIV transmission from mother-to-child. The inception of mobile HIV/AIDS testing units;
- Infectious disease and epidemic notifications are monitored at hospitals and clinics;
- The existence of structured immunisation programmes;
- Public health warnings are made where and when applicable;
- The DoH has a Comprehensive Health Outreach Programme where they collaborate with the Thusong mobile centres. At this platform some of the services provided by the DoH include: observations; nutritional assessment; child health; reproductive health; STI screening; TB screening; condoms and HIV/Aids Counselling and Testing (HCT); and
- Interventions to reduce and manage the burden of disease are usually grouped into three categories:
 - “downstream” interventions, which target the individual;
 - “midstream” interventions, which target groups of people (institutions or communities, for instance); and
 - “upstream” interventions, which are focused on society as a whole. Thus the health service in the Kannaland LM usually focuses its work on midstream and downstream interventions while other provincial departments, spheres of government and civil society organizations focus on upstream factors.

8. Risk increasing or decreasing in the Kannaland LM

At this stage it is difficult to determine what the exact status of the diseases is but indications are that although still high there is a decrease in certain of the EDM areas.

The indications are that there is a definite increase in the occurrence MDR TB in the EDM.

9. Impact the risk has on the development progress in the areas, communities and households it affects

- Human diseases can cause serious public health and economic problems;
- Epidemics can result in high levels of worker absenteeism and productivity losses;
- In communities, clinics and hospitals can be overwhelmed when large numbers of sick people appear for treatment during peak illness periods;
- In low-resource settings, health-care costs for caring for people living with HIV/Aids, cardiovascular diseases, cancers, diabetes or chronic lung diseases can quickly drain household

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resources driving families into poverty ; and

- Secondary consequences include the impact of climate change on health.

10. Secondary impacts within areas and communities affected by the risk

- Loss of livelihoods due to morbidity which impacts on the economically active population;
- Isolation;
- Psychosocial trauma affecting patients and families;
- An increased dependency on government grants; and
- High demand for additional trained staff and suitable facilities for treatment.

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An “animal disease” means a disease to which animals are liable and whereby the normal functions of any organ or the body of an animal is impaired or disturbed by any protozoon, bacterium, virus, fungus, parasite, other organism or agent.

Some diseases infect and are spread by animals only and other diseases, known as zoonosis, can be transferred from animals to humans and result in impairment of human life and/or death.

This section discusses the hazards associated with both forms of diseases that are hazardous to humans and animals and considers the following animal diseases that are prominent in the EDM:

- Rift Valley Fever – big influence on sheep, goat and game farming and causes high mortality rates in young ruminant animals, particularly lambs; and causes abortions in older animals.
- Avian Influenza – big influence on ostrich farming.
- Swine Fever – lesser impact on pork farming.
- African Horse Sickness – manageable influence on horse farming. AHS is endemic in South Africa and the morbidity and mortality are highest in the young equines.
- Tick fever – under control in chicken farming activities.
- Newcastle Disease – under control in chicken farming activities. Domestic fowls, turkeys, pigeons and parrots are susceptible to ND. A milder strain of the virus is seen in ducks, geese, pheasants, quail, guinea fowl and canaries. Furthermore, ND spreads rapidly among birds kept in confinement, such as commercially raised chickens.

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- Foot and mouth disease – limited occurrence in game farming.
- Rabies – limited occurrence. Rabies is a disease that affects all warm-blooded animals. Dogs and bat-eared foxes are the most common carriers and humans, other dogs and cattle are the most important victims.

1. Early Warning signals

Animal Disease	Definition	Symptoms
African Horse Sickness (AHS)	This is a highly infectious non-contagious vector born viral disease affecting all species of Equidae (cattle, pigs, sheep, and goats). It is endemic (occurs naturally).	Respiratory and circulatory damage, accompanied by fever and loss of appetite. AHS manifests in three ways, namely the lung form, the heart form and the mixed form.
Avian Influenza (AI)	AI caused by the influenza virus type 'A', can affect several species of food producing birds (chickens, etc.), pet birds and wild birds. Some strains result in high mortality rates.	Symptoms are minimal and include signs of depression, ruffled feathers, lack of appetite and fever. Hens may at first lay soft-shelled eggs, but soon stop laying eggs.
Bovine	Brucellosis, also called undulant fever or Malta fever, is a zoonosis (infectious disease transmitted from animals to humans) caused by bacteria of the genus Brucella.	Cattle affected with Brucella abortus have high incidences of abortions, or calve weak offspring, arthritic joints, and retention of after-birth, known as retained placenta. Males can also harbor the bacteria in their reproductive tracts, namely seminal vesicles, ampullae, testicles, and epididymides .
Newcastle Disease (ND)	Newcastle disease (ND) is a highly contagious and often severe disease found worldwide that affects birds including domestic poultry.	Symptoms depend on the strain of virus, species of bird, concurrent disease and pre-existing immunity. Symptoms include: Respiratory: sneezing, gasping for air; Digestive: diarrhoea; nervousness, depression, muscular tremors, drooping wings, twisting of head and neck, circling, complete paralysis. A partial to complete drop in egg production and thin-shelled eggs and swelling of the tissues in the eyes and in the neck.
Rabies	Rabies is a viral disease that affects the central nervous system of warm-blooded animals, including humans. Rabies is transmitted to the victim in the	The virus infects the brain and symptoms appear after 2 to 8 weeks. Symptoms include a change in behaviour, staring at the sky, salivation, deprived appetite,

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	saliva when bitten by an infected animal.	chewing stones, cowering, snapping, paralysis of the lower jaw and tongue.
Rift Valley Fever (RVF)	RVF is an acute viral zoonosis that can cause severe disease in domestic animals (such as, cattle, goats and sheep) and humans.	It is a mosquito-borne viral disease characterized by a short incubation period, fever, hepatitis, abortion, and death in young animals. Symptoms in these species are characterized by fever, severe illness, abortions, and a high morbidity and mortality rate.
Salmonellosis	This a bacterial disease caused by strains of Salmonella. It occurs in animals and humans. Foods involved include meat, poultry, eggs and egg products.	With poultry, most Salmonella infections are without symptoms. In humans symptoms include abdominal cramps, diarrhoea, nausea, vomiting, headache, fever, chills. Symptoms usually show 20-48 hours after ingestion of contaminated food .
Swine fever	Classical swine fever (CSF) or hog cholera (also sometimes called pig plague based on the German word Schweinepest) is a highly contagious disease of pigs and wild boar.	Swine fever causes fever, skin lesions, convulsions and usually (particularly in young animals) death within 15 days.
Tick fever	Tick bite fever is a bacterial infection transmitted by ticks.	Symptoms of tick bite fever may include fever, headache, malaise and a skin rash.

Unusual patterns in animal deaths and/or suspicious behaviour will result in tests being conducted. Notification of diseases by producers and Department of Agriculture is done as soon as the outbreak of an animal disease is diagnosed.

2. Hazard frequency

- The incidence of animal diseases in South Africa is monitored by the national Directorate of an Animal Health through a National Disease Surveillance Program.
- State Veterinarians in each province are primarily responsible for disease surveillance in their respective areas.
- The foot-and-mouth disease (FMD) situation in the SADC Region has deteriorated significantly in the last 10 years.
- Animal disease occurs in the area on a regular basis and the Avian Influenzas have disrupted the Ostrich farming activities very seriously over the past 5 years.
- AHS disease first appears in mid-summer (December/January).

3. Areas, communities or households most at risk

The areas and industry significantly affected by animal disease in the EDM are:

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- Ostrich farmers in the Oudtshoorn/Ladismith district especially;
- Ostrich abattoir and workers Oudtshoorn;
- Ostrich meat export industry;
- Leather industry, workers and market Oudtshoorn;
- Horse farmers Ladismith;
- Sheep farmers; and
- Rural and small scale farmers.

4. Likely impacts of hazard

Animal Disease	Impact
African Horse Sickness	All AHS cases must be reported as there is a vaccination protocol and movement control protocol to follow. Control of an outbreak in an endemic region involves quarantine, vector control and vaccination. To prevent this disease, the affected horses are usually slaughtered and uninfected horses are vaccinated against the virus. AHS losses had other huge trade implications such as that the sale of stud animals between South Africa and Namibia was prohibited which led to financial losses.
Avian Influenza	AI is a zoonotic disease and can cause death in humans. It can have severe local effects, causing major losses to production and loss of livelihoods of vulnerable people. This means that long term financial losses are expected due to the costs involved in controlling the outbreak. The risk exists of the movement of migratory birds that can potentially spread the virus to other provinces and countries. The resulting widespread outbreak of the disease could affect trade and poultry production on a global scale.
Bovine	It presents a significant challenge to beef and dairy farmers. Financial implications include the cost of bovine testing, the cost of movement restrictions, replacement costs and cost of biosecurity measures.
Foot and Mouth Disease (FMD)	The Western Cape lost its FMD Free Status after an outbreak of AHS in 2011. Losing this status meant that no meat exports was allowed to countries of the South African Developing Community (SADC).
Newcastle Disease	For ND it leads to the destruction of potentially infected birds, and disposal of destroyed birds and potentially contaminated or infected products. The export of poultry and poultry products is suspended if an outbreak is suspected or confirmed.
Rabies	Rabies can cause infection or death in animals and/or humans.
Rift Valley Fever	The outbreak of RVF in the Western Cape impacted tremendously on the export of animal products (skins and wool), because China as the biggest importer no longer allowed the import of skins. This saw the number of exports decrease. The disease also results in

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	significant economic losses due to death and abortion among RVF-infected livestock.
Salmonellosis	Salmonella infection is a public health concern. Many strains of Salmonella are zoonotic agents, spreading to humans from contaminated animal origin food products. In humans, Salmonellosis is one of the most common causes of food poisoning.
Swine fever	Loss of livestock and further financial implications.
Tick fever	Potential serious complications of this infection include hemorrhagic fevers and death.

5. Level of risk for different situations and conditions

- Many important animal diseases are affected directly or indirectly by weather and climate. These links may be spatial, with climate affecting distribution, temporal with weather affecting the timing of an outbreak, or relate to the intensity of an outbreak.
- Animal disease can also be associated with the combination of drought and heavy rainfall and flooding.
- Vector distributions are largely dependent on environmental variables such as temperature, moisture and wind.

African Horse Sickness

Increased vulnerability of spread and exposure during summer. During the colder winter weather helps to slow down the spread of the AHS virus, as the virus replication and the vector multiplication are both inhibited. The most important vector in endemic areas is a biting midge which prefers warm, humid conditions. Most animals become infected in the period from sunset to sunrise.

Newcastle Disease

Yearly. ND can survive for several weeks in a warm and humid environment on bird's feathers, manure and other materials. The virus can survive indefinitely in frozen material; however, the virus is destroyed rapidly by dehydration and by the ultraviolet rays in sunlight.

Rift Valley Fever

During the summer months and the beginning of autumn.

Swine fever

During Winter and with the changing of the seasons.

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6. Conditions of vulnerability that increase the severity of the hazard

- Higher temperatures resulting from climate change may increase the rate of development of certain pathogens or parasites that have one or more life cycle stages outside their animal host;
- Cost and effectiveness of treatment;
- Access to treatment and expertise in certain rural areas;
- General lack of knowledge/awareness regarding the spread of animal disease;
- Lack of scientific farming practices amongst small farmers;
- Non-conformance with regard to pre-notification of movement of animals; and
- Lack of enforcement capacity.

7. Capabilities or resources that exist to manage the risk

Collaboration

- The relevant industry actively collaborates and supports the DoA in the control of any animal disease outbreaks. This includes role-players from racing, Onderstepoort and other relevant animal associations;
- Emergencies such as floods and animal disease outbreaks are shared responsibilities between national and Provincial Departments of Agriculture. The Department of Agriculture, Forestry and Fisheries (DAFF) may dispatch a team of officials to assist in disaster assessments where provincial capacities are inadequate to respond to a disaster;
- During 2013 Smartpen technology was put into use by the Animal Health Technicians within Veterinary Services. This technology simplifies data capturing and improves data integrity and should make it easier to capture, store and analyse data coming in from the field. Upgrades to the World Organisation for Animal Health (OIE) listed disease data capture (disease outbreaks, follow ups and vaccinations) system were made during 2012 with a few added features increasing the user-friendliness of the system and the power of the analysis that is possible online;
- The epidemiology section of Western Cape Veterinary Services is tasked with assisting State Veterinarians during outbreak campaigns. Epidemiology also encompasses the design of surveillance programmes for various animal diseases and assists in determining the status of diseases in the Western Cape Province. The section maintains animal surveillance databases as well as information on animal census. It also publishes a monthly newsletter with pertinent epidemiological information which can be used by private veterinarians as an information source;
- The Epi website is primarily used to assist field officials with up to date documentation regarding their work. It also acts as an archive for the monthly epidemiology report and it provides links to various web based data systems;

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- State veterinarians are responsible for training and education on both a formal and informal basis. The Control Animal Health Technician (CAHT) in each state veterinary office monitors and oversees the work of the other AHTs and also mentors AHT students during their final year of training which is an experiential training year ; and
- UBALO is a newly developed animal census online capturing system launched within the Western Cape during June and July 2013.

Legislation

- The DAFF - Directorate Animal Health has a myriad of contingency plans and emergency procedures to follow in order to prevent and manage the possible outbreak of animal diseases within the border of the Western Cape. This includes:
 - Quarantine procedure are being implemented;
 - Inspections of animals and meat are conducted by a inspectorate;
 - Animal registration requirements are to be followed as stipulated by the Department of Agriculture;
 - Vaccination programmes in high risk areas are implemented on a regular basis;
 - Movement control of animals;
 - Export control over animals; and
- Legislation applicable to the mitigation and response to the outbreak of animal diseases includes:
 - Veterinary Procedural Notices (VPNs);
 - Vaccinate your dog and cat. Beware Rabies kills! Department of Agriculture booklet;
 - The Animal Diseases Act (Act No. 35 of 1984);
 - The Meat Safety Act of 2000 (Act No. 40 of 2000);
 - Identification of animals in terms of Animal Identification Act (Act No. 6 of 2002);
 - The Meat Inspectors Manual Abattoir Hygiene Directorate: Veterinary Services Veterinary Public Health, National Department of Agriculture Republic Of South Africa January 2007; and
 - The Guide for the Medical, Veterinary and allied Professions 2010.

8. Risk increasing or decreasing in the Kannaland LM

Risk Increasing

- There is no formal communication between the Department of Agriculture and the Eden DMC or Kannaland LM with regards to the outbreak of animal diseases ; and

ANIMAL DISEASES

- Climate change will result in an increasing number of cold fronts, severe weather, heat waves, droughts and the migration of air pollutants. This has the potential of exacerbating the outbreak of certain animal diseases. And animal disease poses a serious threat to the commercial and farming communities in the EDM.

Risk Decreasing

- The incidence of animal diseases in South Africa is monitored by the national Directorate of an Animal Health through a National Disease Surveillance Programme;
- State Veterinarians in each province are primarily responsible for disease surveillance in their respective areas;
- It can be seen that technicians are either spatially more accurate when logging their data or there is an increase of doing smaller quantities of vaccination in more areas;
- Upgrades to the OIE listed disease data capture (disease outbreaks, follow ups and vaccinations) system were made during 2012 with a few added features increasing the user friendliness of the system and the power of the analysis possible online ;
- The FMD situation in the SADC Region has deteriorated significantly in the last 10 years; and
- Regular testing, monitoring and surveillance are conducted on livestock, ostriches, poultry and pet animals for diseases such as bovine tuberculosis, bovine Brucellosis, rabies and sheep scab and trade sensitive diseases such as foot and mouth disease and mad cow disease. These actions play a major role to provide disease-free guarantees for exports of animals and animal products.

9. Impact the risk has on the development progress in the areas, communities and households it affects

- Agriculture plays an important role in the Eden District municipality – it provides employment and will continue to do so, contributes to the Gross Domestic Product (GDP), provides a 'bread basket' in close proximity to major settlements (food security) and is the base for tourism activities. Protecting and promoting the agricultural economy is therefore a priority for the district.
- The basis for sustainable development is economic vitality, ecological integrity and social equity.
- With the serious economic losses experienced through flooding, water shortage and animal disease in EDM development stays a challenge.
- Development directed at ensuring water surety for the agricultural sector and job creation for the inhabitants of the area should be a priority.
- Serious strategies regarding change of land-use are required to ensure sustainable development.

10. Secondary impacts within areas and communities affected by the risk

- Enhancement of poverty;

ANIMAL DISEASES

- Socio economic decay of communities;
- Negative influence on tourism;
- Recreational/social loss to communities using animals for agricultural shows and sport; and
- Negative impact on foreign trade business.

PART THREE

COMMUNITY BASED DISASTER RISK ASSESSMENT

FINDINGS OF COMMUNITY BASED DISASTER RISK ASSESSMENT

As previously stated, the purpose of Community Based Disaster Risk Assessment (CBRA) is to consult the community on their perceptions, experiences and concerns regarding disaster risk in the area they reside.

A community is seen as a group that may share one or more things in common such as living in the same environment, similar disaster risk exposure, or having been affected by a disaster. Common problems, concerns and hopes regarding disaster risks may also be shared.

However, people living in a community, for example men, women and children, have different vulnerabilities and capacities. Some may be more vulnerable or more capable than others. The level of education and perceptions of the community members that take part in such an assessment will have a big influence on the outcomes of the CBRA.

A benefit of CBRA is the fact that it strongly supports indigenous knowledge. “Indigenous knowledge may be defined as knowledge that has been created and developed over a period of time. Indigenous knowledge represents generations of creative thoughts and actions within a particular community in an eco-system generated to keep abreast of ever-changing agro-ecological and socio-economic environment.” During this process, indigenous knowledge was thus also gathered. Ground truthing of other available information, both documented and undocumented historic events can also be done through this process.

ATTENDANCE OF ROLE PLAYERS

The Kannaland LM CBRA workshops were held as follows:

WARD	DATE	TIME	VENUE	STAKEHOLDERS
Zoar	07/03/15	19:00	Zoar Community Hall	Whole community
Calitzdorp	08/03/15	19:00	Calitzdorp Municipal Offices	Whole community
Ladismith	09/03/15	19:00	Ladismith Library Hall	Whole community

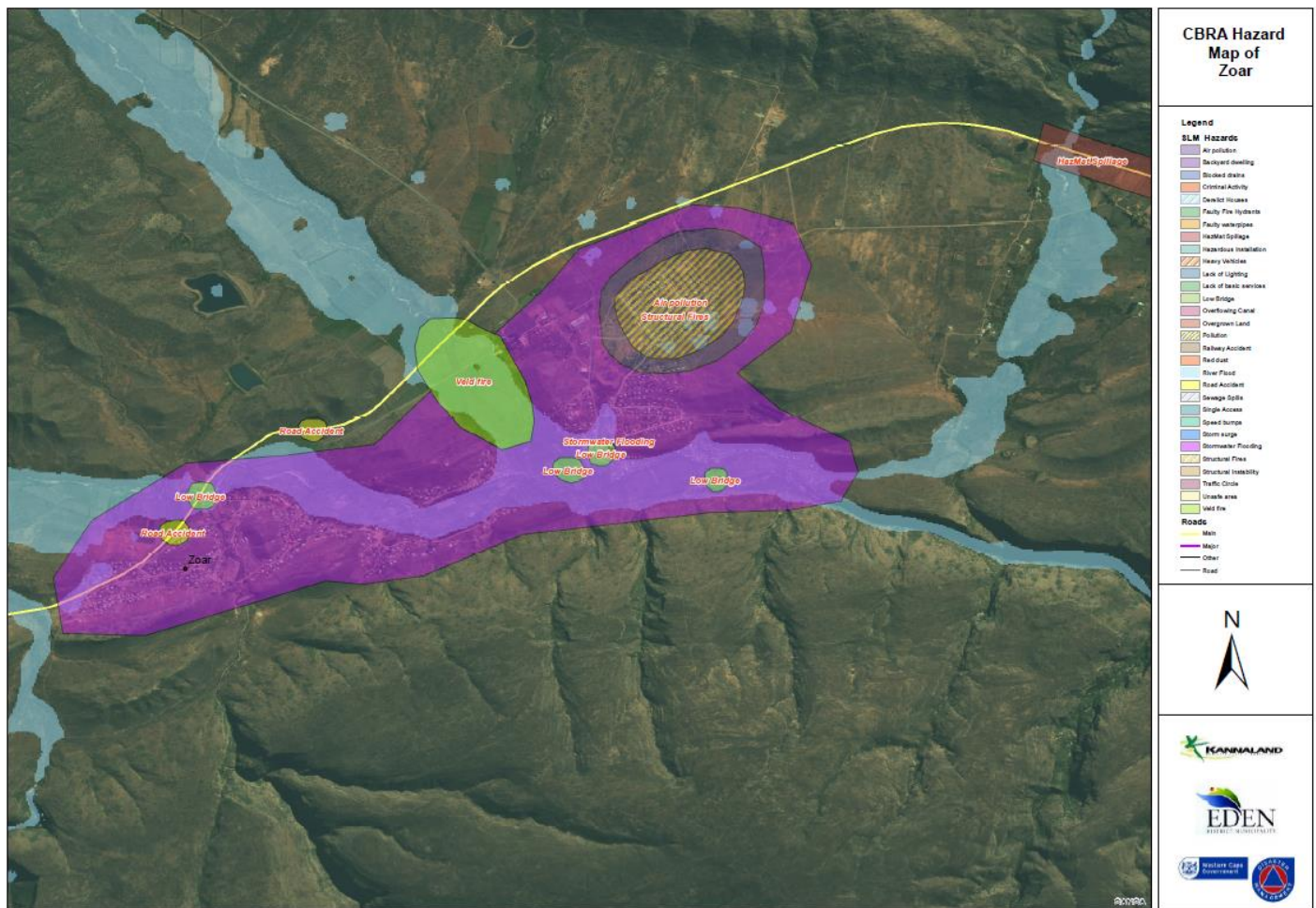
PARTICIPANTS PERCEPTION

Great concern was expressed across the board on poor service delivery regarding the following:

- Inadequate health facilities in communities
- Alcohol and substance abuse
- Poor response times of emergency services (Police, EMS and Fire Services)
- Increase in backyard dwellers
- Derelict and abandoned buildings increasing crime
- Inadequate traffic management and law enforcement
- Flooding and inadequate storm water infrastructure
- Inadequate refuse disposal, littering and indiscriminate dumping
- Fires, both structural and vegetation

WORKSHOP RESULTS

Workshop 1: Zoar



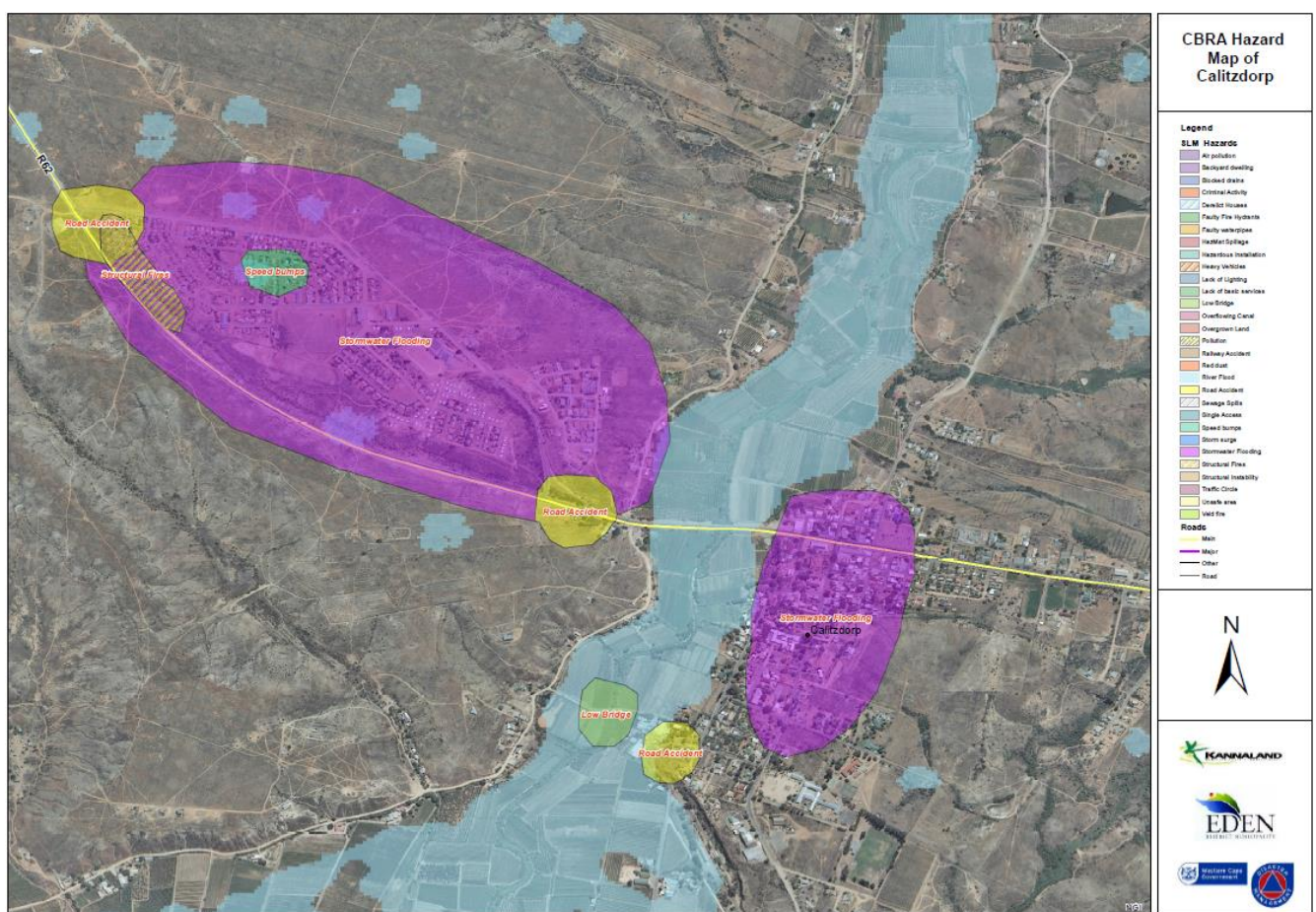
Community Based Risk Assessment Hazard Map: Calitzdorp: Zoar

Hazard Name	
Structural fires	Alcohol and drug abuse
Veld fires	Lightning strikes
Inadequate health facilities	High school drop-out rate
Women and child abuse	Sewage spills
Stormwater flooding	High levels of crime
High unemployment	Lack of recreational / sport facilities
Human diseases	Road accidents
Stray animal	Riverine flooding
Water shortages	Strong winds

The following hazards/issues/concerns were raised by the community members present at the workshop:

- **Structural fires** of formal and informal structures were highlighted as a major concern within the area. This is attributed to inhabitants starting open fires and the effects of electricity outages. The response of the fire services was also listed as being poor.
- The occurrence of **veld fires** in the Zoar area is affecting the operations of farmers as well as people suffering from respiratory problems.
- **Riverine flooding** is a major problem in the area due to the Seweweekspoort and Jacobus Nel rivers. Heavy rainfall experienced in Laingsburg affects the Zoar area and results in floods. Some houses in the area also get cut-off during floods with the mobility of schools children also affected.
- **Stormwater flooding** is a major concern throughout the area particularly in informal dwellings after heavy rainfall has occurred.
- The area has in the past experienced **severe storms** resulting in excessive winds which have damaged infrastructure.
- The presence of **stray animals** such as pigs and horses was also highlighted as a concern due to the limited space within the community.
- **Road accidents** were highlighted as a major concern within the area, with the intersection at the sports field and the R62, the R62 passing through the town as well as the Huisrivier Pass highlighted as high risk. The lack of proper scholar patrols and the absence of pavements in the area are worrying and needs to be addressed.
- **Alcohol and drug (Tik and mandrax) abuse** is widespread within the area especially amongst the youth and unemployed. This issue is linked to the high prevalence of crime in the area which includes murder, assault and house burglary.
- The **lack of appropriate recreational and sports facilities** was highlighted as an exacerbating factor contributing to the social ills in the community.
- The occurrence of **sewerage and waste water spills** in the community was also highlighted as a concern.

- The **health facility** in the area is understaffed and has no Doctor present. The structure itself is very small and has a limited waiting area. Due to the limited size of the medical facility, patient confidentiality was highlighted as a major concern. There is also a lack of ambulances to service the area with no emergency service available at the medical facility at night. The closest hospital is in Ladismith.
- The prevalence of human diseases such as TB and HIV is widespread throughout the area. The community within Zoar is highly susceptible to contracting TB due to the houses being constantly damp and overpopulated.
- Water shortages were highlighted as one of the biggest concerns in the area. The lack of infrastructure development in relation to the population growth in the area as well as the current drought is exacerbating the problem. The need for a water reservoir was mentioned as a possible solution to the problem. The community also felt that upstream over extraction was also affecting their ability to irrigate their lands.

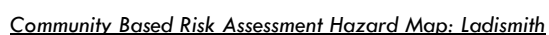


Hazard Name	
Structural fires	Road accidents
Veld fires	Hazmat spillage
Inadequate health facilities	Alcohol and drug abuse
Women and child abuse	Riverine flooding
Stormwater flooding	Water discoloration
High unemployment	

The following hazards/issues/concerns were raised by the community members present at the workshop:

- **Stormwater flooding** was highlighted as problem in the area, particularly in Voortrekker St and the High School due to lack of stormwater infrastructure maintenance. Bergsig is also adversely affected by stormwater flooding due to a lack of stormwater infrastructure.
- **Riverine flooding** is a considered a major problem in the area with many low lying bridges, especially those at Warmbaths most affected. Both formal and informal settlements are affected by riverine floods. Community members indicated that the clearing of alien vegetation in rivers would reduce the impact of floods. It was also mentioned that the Water Board has drawn up a Flood Action Plan for the area.
- **Structural fires** in specifically the informal settlement (Waletuinskamps) were listed as a concern in the area with fire services slow response times being highlighted as a problem. No fire station in the town, with the closest fire station located 50km away (Oudtshoorn and Ladismith). There is only one fire engine available in Ladismith which is in a poor condition. The installation of prepaid meters in the informal settlements has reduced the fire risk significantly. A new fire truck courtesy of the Western Cape Government is scheduled to arrive in the near future. The need for the training of first responders was also highlighted.
- **Veld fires** do occur in the area but is not deemed a major concern.
- **Road Accidents** was highlighted as major concern in the area. Speeding vehicles in residential areas as well as trucks along the R62 are the main causes of accidents. The Huisrivier Pass as well as some of the blind spots along the R62 are of particular concern to the community. The need for speedbumps along Cement and Andries Pretorius Roads as well as a Three-way stop or traffic circle at Cement Road and the R62 is deemed critical to reduce the risk of road accidents.

- ## Workshop 3: Ladismith



Hazard Name	
Structural fires	Alcohol and drug abuse
Veld fires	Dam break
Inadequate health facilities	Hazmat spills
Women and child abuse	Inadequate Emergency Services
Stormwater flooding	Industrial fires
High unemployment	Water shortages
Human diseases	Road accidents
Riverine flooding	

The following hazards/issues/concerns were raised by the community members present at the workshop:

- **Veld fires** are prevalent in the area specifically in the farming areas and along the Groenrivier. The maintenance of the fire break under the Swartberg is critical for the area.
- **Structural fires** mostly occur in the informal areas within the town, the frequency of fires occurring in the CBD is very low.
- The risk of **industrial fires** in the area is perceived to be high due to the many factories located in and around the town. A case in point is the Ladismith Cheese factory that burnt down in 2015.
- **Riverine flooding** occurs throughout the area with most rivers (Kleinswartberg streams and Groenrivier) affected. Farming communities located next to rivers are regularly cut-off during floods. The Graciapas is also regularly cut-off during flood events as well as the Huisrivier pass that poses a major risk due to rock falls during heavy rains.
- **Stormwater flooding** is a problem throughout the town due to inadequate / lack of infrastructure.
- The possible **dam failure** of the Le Grange Dam due to the state of the dam wall was also perceived to be a risk in the area.
- **Water shortages** are one of the biggest issues in the area due to the lack of adequate storage capacity. The water supplies in the area are consistently under pressure the during summer months. As yet no sustainable solution has been put forward.

- **Human diseases** such as HIV and TB are highly prevalent in the area, with drug resistant TB on the increase due to the general overpopulation/overcrowding of households. Alcohol related injuries are such as assaults are also very high.
- Current **health facilities are inadequate**, however new clinic under construction. There is currently no paramedic in Kannaland.
- **Drug and alcohol abuse** is on the increase in the area. A new drug has being introduced in the town which is highly addictive. Prevalent amongst youth in the area.
- There is also a high prevalence of **women and child abuse** in the area, particularly on All Pay days.
- The **transport of Hazmat** is not perceived to be a major risk; however the municipality is not informed of the contents of trucks moving through the area.
- **Road accidents** along the R62 are a common occurrence with truck accidents a major issue in the area.

CONCLUSION

Kannaland Bay Local Municipality is an important part of the economic growth area of the Eden District. Due to the seasonal nature of industries, the area is facing an increasing unemployment problem. This, together with relatively high percentages of households with no or inconsistent income, creates several social challenges.

The natural environment and its resources of the area are sensitive and susceptible to over-exploitation or inappropriate use. This environment includes natural ecosystems and habitats that are of global importance.

The KLM recognises that if the objective of achieving sustainable development in the area is to be realised, a concerted effort is required to reduce recurrent disaster risks in its area. This can only be achieved by:

- Creating resilience amongst its people and its infrastructure;
- Strengthening capacity to anticipate significant events and disasters; and
- Improving the management of such events in order to limit the effects wherever possible.

It also requires the development and implementation of appropriate risk reduction methodologies and the integration of such methodologies into development plans, programmes and initiatives as well as the management of high risk developments.

Disaster risk reduction is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters i.e. Poverty, Population growth, Rapid urbanisation, Transition in cultural practices, Environmental degradation, Lack of awareness and information and War and civil strife.

Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, as well as improving preparedness and early warning for adverse events are all examples of disaster risk reduction.

Disaster Risk Management practices should pay attention to both the hazard itself, as well as the populations vulnerable to these hazards. Given that the central factor in underlying risk is probably the presence of humans and their assets in hazardous areas, localized community-based disaster management is a critical aspect of risk reduction. Disaster reduction is most effective at the community level where specific local needs can be met.

CHALLENGES

- Maintenance and upgrading of essential services infrastructure;
- Improving emergency services response and resources throughout the area;
- Managing heavy vehicles and traffic on the main routes in the area;
- Strategic water management planning;
- Equitable service delivery to all population groups;
- Addressing climate change;
- Addressing poverty through job creation;
- Youth development programmes (skills development);
- Structured and integrated invasive plant eradication programme; and
- Addressing risk reduction in IDP strategies.

POTENTIAL

The inclusion of local, municipal and district role-players is crucial to the successful implementation of this DRA. This will mean that the document will have local buy-in and ownership and will support the LM for the inclusion of relevant data in their IDP and aligning disaster risk reduction with their IDP.

KEY FINDINGS

- The natural environment and resources of the KLM are sensitive and susceptible to over-exploitation or inappropriate use. This includes natural ecosystems and habitats that are of global importance.
- Due to its physical location, topography and the climatic conditions of the area, the KLM is particularly vulnerable to the impact of climate change. Climate change is already harming food production and these impacts are projected to increase over time, with potentially devastating effects. Higher temperatures, for example, could place further stress on water-scarce regions like the EDM and make it harder to rear animals and grow food crops and sustain the economic growth of the district. Considering conditions that increase the vulnerability to climate change of the area, the food, water and energy vulnerabilities should be analysed in detail. In this regard the KLM depend heavily on all three categories to ensure sustainable development is thus particularly vulnerable in all three categories.
- The future climate of the Western Cape is likely to be one that is warmer and drier than at present, according to a number of current model projections. In support of these projections, recent temperature trends reveal appreciable warming in the Western Cape over the past three decades. Rainfall trends are not as clearly identifiable. A future that is warmer, and possibly drier, will encompass a range of consequences that will affect the economy, the livelihoods of people and the ecological integrity of the Western Cape region. The challenge for the KLM is to develop

a strategy and develop infrastructure to ensure water surety which can facilitate sustainable tourist and agricultural activities and development initiatives for the area.

- New residents being lower-skilled migrants in search of jobs in the area are causing an increasing unemployment problem. This, together with relatively high percentages of households with no or inconsistent income, creates several social challenges. Community and youth development programmes (skills development programmes) based on local needs should be planned and implemented throughout the area.
- In particular, problems on basic services infrastructure are experienced in the KLM. The question of replacement, upgrading and renewal of essential infrastructure is a matter of high importance but at the same time poses a number of challenges on the availability of financial resources, clarity on responsibility and fragmented control.
- The issue of effective waste management, potable water and pollution are areas of concern in all the wards. The question of littering, its adverse effect on the environmental health aspects in the area and on stormwater infrastructure must be addressed as a matter of urgency.
- The question of substance abuse is of great concern throughout the area. This issue should be addressed on an urgent basis and will require a comprehensive structured multi-disciplinary and multi sectoral approach. This socio-economic problem is known to lead to family conflict, increased parental conflict and child abuse, to mention a few. The foregoing is a contributing factor to increased vulnerability, less resilience and dysfunctional communities.
- Due to the fact that some areas are situated far from the emergency services and response times are long, strategies should be developed to address this concern and serious consideration should be given to aspects such as establishing and equipping community based volunteer organisations that can act as a first response in emergency situations.
- The question of road safety and particularly the management and control of heavy vehicles on the main routes in the area needs to be addressed in a structured manner and will require a comprehensive multi-disciplinary and multi sectoral approach. In this regard Department of Transport, SANRAL, SAPS, Provincial Roads Department, Provincial and Municipal Traffic and Law Enforcement Services and representatives of the various transport organisations all have a very important role to play in the process.

RECOMMENDATIONS

The CBRA results must be dealt with at community/ward level, therefore the KLM should implement a community based disaster risk reduction process. The subject is discussed in detail earlier in the report. To be able to implement this successfully, this report should be communicated to the people in the areas. It is therefore recommended that the following actions be implemented:

- Communicate the existing information as reflected in the findings and have it verified in the areas.
- Translate it with the assistance of area representatives and other stakeholders into area-based risk reduction strategies. In this regard it is recommended that the KLM Disaster Management Advisory Forum together with the Ward Committees play a leading role in the community based risk reduction planning and implementation strategies.
- Although it is known that there are a number of projects being planned and implemented to address some of the problems identified it is recommended that from the results the following programmes and projects be developed and implemented throughout the area by means of an integrated and multi-disciplinary planning approach co-ordinated and monitored by the KLM Municipality Disaster Management Advisory Forum.

No	Programme	Lead Department
1	A structured and integrated campaign to raise the awareness of the general public on fire prevention and fire risk reduction. This should include the correct emergency numbers for emergencies.	Fire Rescue and Emergency Services Disaster Management Services
2	A structured programme based on the needs identified in the remote areas to recruit, train and equip volunteers to assist with area based first aid posts.	Fire Rescue and Emergency Services Disaster Management Services Health Services
3	A structured programme based on the needs identified in the remote areas to recruit, train and equip volunteers to assist with area based fire prevention and response teams.	Fire Rescue and Emergency Services Disaster Management Services
4	An integrated programme to educate the general public in anti-littering and responsible domestic waste management and disposal. This should include: • Problems caused by refuse in Stormwater systems;	Technical Services Waste Management Services Environmental Health Services

No	Programme	Lead Department
	- Responsible and correct use refuse transfer stations; and - General environmental health problems caused by indiscriminate dumping of waste material/refuse.	
5	A structured and comprehensive multi-disciplinary and multi sectoral strategy and plan must be developed and implemented to address the problem of substance abuse in the area.	Social Development Services Health Services Dept. of Education SAPS Law Enforcement
6	Structured, professional and sustainable youth development programmes should be implemented throughout the area.	Social Development Services Youth Development
7	The entire early warning strategies must be revised and updated and be made user friendly for those who are at risk. As previously stated in the report, the early warning system must be designed to serve people effectively, and such systems must be integrated and link all actors in the early warning chain, including the scientific and technical community, public authorities and local communities. Finally early warning must be complemented by professional training and capacity building activities and the allocation of resources to enable timely actions to be taken to avert loss. This applies to all areas.	Fire Rescue and Emergency Services Disaster Management Services SANParks
8	An awareness and education programme to inform pedestrians on the safe use of roads. There are at present several initiatives to enhance pedestrian safety, these should be pursued.	Traffic Services Dept. of Education
9	A system to enforce the drawing up and implementation of traffic management plans at events must be implemented. This must be included in the events application and approval system of the KLM.	Traffic Services and Law Enforcement Service Tourism Dept. / Events Management Disaster Management
9	A Strategy to manage and control heavy vehicles on the main routes in the area.	Municipal Traffic and Law Enforcement Services Provincial Traffic Services Department of Transport, SANRAL, SAPS, Provincial Roads Department, Representatives of the various

No	Programme	Lead Department
		transport organisations
10	Due to the environmentally sensitive nature of the KLM, eco-based risk reduction planning is essential in all development planning. Ecological risk assessments evaluate the likelihood of adverse ecological effects caused by stressors related to human activities.	Development Services Environmental Services Human Settlement Development Services
11	The question of water scarcity will have to be considered before developments can be approved. In this regard cognisance should be taken of the contents of the Department of Water Affairs report Project No WP9714 "Development of Reconciliation Strategies for all Towns in the Southern Planning Regions, September 2011".	Development Services Water Services

In order to implement the above recommendations it is recommended that a lead individual be appointed to drive the process by determining priorities and by engaging with lead departments and the KLM IDP office.

The above process must be initiated and monitored by the KLM Disaster Management Advisory forum on a constant basis.

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KANNALAND: HUMAN SETTLEMENT PLAN (HSP)



*Final Draft
May 2016*

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ACRONYMS

BNG - Breaking New Ground

CRU - Community Residential Units (Hostels Redevelopment Programme)

KHSP – Kannaland Human Settlement Plan

KSDF - Kannaland Spatial Development Framework

EHP - Emergency Housing Programme

FLISP - Finance Linked Individual Subsidy Programme

HSP - Human Settlement Plan

ISHS - Integrated Sustainable Human Settlement

IRDP - Integrated Residential Development Programme (Project Linked Subsidy)

NDoHS - National Department of Human Settlements

NDP - National Development Plan

NHFC - National Housing Finance Corporation

NSDP - National Spatial Development Perspective

PHP - People's Housing Process

PSDF - Provincial Spatial Development Framework

RDP - Rural Development Programme

SDF - Spatial Development Framework

UISP - Upgrading of Informal Settlements Programme

IDP- Integrated Development Plan

WCHDDDB – Western Cape Housing Demand Database

JPI - Joint Planning Initiative

LED- Local Economic Development

Kannaland LM – Kannaland Local Municipality

NGO - Non Government Organisation

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1. INTRODUCTION AND BACKGROUND

1.1 Sustainable Human Settlements

This document is developed within the context of Human Settlement Plan as the anchor of creating sustainable resilient integrated settlements with the support of provincial arms of government. A good understanding of the requirements and standards for the creation of a resilient environment is necessary for effective planning and service delivery. The most significant of it all is demographic analysis and projections for forward planning. In the past emphasis has been place on housing delivery with little consideration of the social integration component of settlements. Amongst the mechanisms recently advocated for through the National Development Plan (NDP) is the creation of sustainable integrated human settlements with different income groups and social backgrounds.

The shifts and changes in human settlement thinking is not yet fully accepted as increasing pressure on municipalities to deliver housing opportunities with little funding and capacity available at their disposal. Regardless of these realities the provision of human settlements is still a high priority for most municipalities. Diverse challenges do however exist with regard to the capacity of bulk infrastructure services with specific reference to supply of basic services in form of water, electricity, sanitation and waste removal. These infrastructure backlogs attributed to most rural municipalities which are also evident in Kannaland Local Municipality (KLM), thus has an effect on the delivery of human settlements. Over the past few years the municipality has enjoyed accelerated housing provision but the recent bulk infrastructure challenges is creating pressure on the municipality to deliver.

A Housing Pipeline (2013/14) was developed through the assessment of the demand for low and middle income groups housing in Kannaland Municipality. Given the high unemployment in towns and the agricultural nature of the local economy, which is affected by the national and international trends toward a magnetisation of the agricultural sector has resulted in a significant increase in the demand for low cost housing.

To the contrary non-availability of homes for this grouping consisting of municipal workers, nurses, teachers, government officials, and ordinary factory workers and policemen has highlighted the demand for affordable housing.

Given the demand for low and middle income earners settlements, there is a serious need for a credible Human Settlement Plan. The plan will ensure medium to long term planning with regard to the delivery of the appropriate infrastructure that will enable the municipality to address the backlog for low cost housing and make land available for affordable housing market segment. A portion of affordable housing is also subsidised by the Department of Human Settlements depending on the income bracket.

Within the context of using human settlement development as a catalyst for other municipal services delivery a credible human settlement plan is required in Kannaland to combat all the issues associated with rural municipality to manage their housing situation.

The Human Settlement Plan will entail the following technical work:-

- ❖ Spatial planning analysis
- ❖ Topographical survey
- ❖ Implementation readiness assessment
- ❖ Biodiversity assessment
- ❖ Bulk infrastructure services assessment
- ❖ Social amenities assessment

With the assistance of DHS a Beneficiary Selection Policy was initiated, developed and adopted by the municipality in 2013/14 financial year. This policy directive is to assist municipalities in the regulation of the housing waiting list and the allocation of housing to beneficiaries in a transparent and comprehensive manner. This policy will also enable the municipal council to determine the demand for housing in both rural and urban areas and thus be able to proactively plan for its citizens.

Apart from this long term strategic planning considerations, the municipality will also facilitate other stakeholders in their jurisdiction for transversal partnering for the creation of sustainable integrated human settlements. Taken the opportunity from this process to consolidate and present community needs identified through the Integrated Development Plan (IDP) consultation process.

1.2 Principles of integrated and sustainable human settlements

- ❖ Land Infill
- ❖ Densification
- ❖ Development within urban edge
- ❖ Mixed development
- ❖ Access to public transport
- ❖ Variety to public transport
- ❖ Variety of social amenities to choose from
- ❖ Access to economic opportunities
- ❖ Variety of housing instruments relevant to clientele

1.3 Purpose of a Human Settlements Plan

The purpose of this Human Settlement Plan is to feed into the Provincial Multi Year Housing plan. To establish a medium to longer term (i.e. 20 year) strategy for the development of integrated and sustainable human settlements within the municipality's area of jurisdiction.

To identify specific priority projects emanating from these programs for which more detailed planning is required to implement them.

Furthermore, this HSP guideline will assist the local municipality in the following:

- ❖ Guiding the vision of municipality.
- ❖ Delivering integrated and sustainable human settlements through the compilation of credible HSPs.

- ❖ Drawing linkages with the Integrated Development Plan (IDP) process with adequate information about the housing projects, their benefits, parameters as well as strategic and operational requirements.
- ❖ Ensuring that the contents and process requirements of planning for sustainable human settlement development are adequately catered for.

1.4 Legislative & Policy Framework

The Breaking New Ground (BNG) policy as well as the Western Cape Sustainable Human Settlement Strategy Goals forms the strategic basis for the approach to developing a Human Settlement Plan at local government level. The BNG proposes to “promote the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing.”

Housing is interrelated with many policies and acts, whether it is the environment, government, social amenities or infrastructure. **Table 1** depicts the policies and different programmes at National and Provincial level that relate to housing delivery and human settlement development.

Act	Policies & Strategies
• Constitution of South Africa, • Housing Act, No.107 of 1997 • Municipal Structures Act, 1998 and 2000 • Municipal Structures Act, No.32 of 2000 • Development Facilitation Act, No.67 of 1995 • Division of Revenue Act, 2005 • Intergovernmental Relations Framework Act, No.13 of 2005 • Disaster Management act, No.57 of 2002 • Spatial Planning Land Use Management Act • Western Cape Housing Development Act, No. 6 of 1999 • Restitution of Land Rights Amendment Act 15 of 2014 • National Environmental Management Act • Rental Housing Act 50 of 1999	• National Housing Code • National Development Plan (NDP) • National Spatial Development Framework • Breaking New Ground Comprehensive Plan • Provincial Spatial Development Framework (PSDF) • Provincial Growth and Development Strategy (PGDS) • Integrated Urban Development Framework • Draft Western Cape Human Settlement Framework • Human Habitat No.108 of 1996 • Millennium Development Goals (MDG) • Draft Informal Support Plan Strategic Framework

Table 1: Summary of Human Settlements related policies, strategies and acts

1.5 Roles and Responsibilities

National Government must establish and facilitate a sustainable national housing development process and determine national housing policy.

Provincial Government must create an enabling environment by promoting and facilitating the provision of adequate housing within the framework of national housing policy.

Municipalities must pursue the delivery of housing, within the framework of national and provincial policy, by addressing issues of land, services and infrastructure, and creating an enabling environment for housing development.

1.6 Roles and Responsibilities of Municipalities

The Housing Act sets out the roles and responsibilities for local government, but does not differentiate between B-Municipalities and C-Municipalities. It is therefore the responsibility of B and C municipalities to address issues regarding land, services and infrastructure provision when pursuing housing delivery. Municipalities are responsible for housing delivery within the area of jurisdiction.

It is the municipalities' **responsibility** to:

- ❖ Initiate, plan, co-ordinate, facilitate, promote and enable appropriate housing development;
- ❖ Provide a Healthy and Safe environment;
- ❖ Provide economically efficient Services;
- ❖ Set Housing Delivery Goals;
- ❖ Identify and designate land for Housing;
- ❖ Create and maintain a financially and socially viable public environment;
- ❖ Promote the resolution of conflicts arising in the housing development process;
- ❖ Provide bulk and Revenue Generating Services; and
- ❖ Plan land use.

In the national housing programme, Municipalities may play the **role** of one of:

- ❖ Promoter of a housing development project by a developer.
- ❖ Developer in respect of the planning and execution of a housing development project.
- ❖ Administrator of any national housing program.
- ❖ Facilitator and supporter of the participation of other role players in the housing development process.
- ❖ Joint venture contractor with a developer in respect of a housing development project.
- ❖ A separate business entity established to execute a housing development project.

1.7 Kannaland IDP's strategic alignment with National, Provincial and District Arms of Government

The overall planning context which informs and defines the Kannaland IDP is the National Development Plan (NDP), which was signed into power during August 2012. The NDP contains 36 objectives and 36 actions which impact directly on Local Government. The Western Cape Provincial Government's draft strategic plan: Delivering the open opportunity society for all (2010) identifies 5 strategic priorities. The Eden District Municipality has identified seven key strategic goals which are essential for the growth and development of the district. **Table 2** below indicates the strategic alignment of Kannaland Municipality's Strategic Objective with Eden District Objectives, Provincial Strategic Goals (PSG) and National Development Plan (NDP).

1.8 Integrated Development Plan 2015/16 Review

Kannaland Objectives	Eden District Objectives	Provincial Strategic Goals (PSG's)	NDP Objectives / Outcomes
KPA1: To provide access to reliable infrastructure that will contribute to a higher quality of life for Kannaland citizens	Conduct regional bulk infrastructure planning & implement projects, roads maintenance and public transport; manage and develop council fixed assets (3)	PSG 1: Create opportunities for growth and jobs.	Outcome 6: Efficient, competitive and responsive economic infrastructure network
KPA2: To provide adequate services and improve our Public confidence	Increasing wellness (4) Integrating service delivery for maximum impact (10)	PSG 2: Improve education outcomes and opportunities for youth development	
KPA3: To strive towards a safe community in Kannaland through the proactive management of environmental health, fire, traffic and disaster risks	Promote sustainable environmental management and public safety (4)	PSG 3: Increase wellness safety and tackle social ills	Outcome 2: Improve health and life expectancy Outcome 3: All people in South Africa protected and feel safe Outcome 7: Vibrant, equitable and sustainable rural communities and food security Outcome 10: Protection and enhancement of environmental assets and natural resources Outcome 11: A better South Africa, a better and safer Africa and world
KPA4: To facilitate Economic Growth and Social facets of community development	Grow the district economy (7) Healthy and socially stable communities (1)	PSG 4: Build a quality living environment, resilient to climate change: Outcome 1: Sustainable ecological & agricultural resource-base Outputs: Maintenance & Sustainable Use of agricultural & Ecological Resources & Infrastructure Climate Change Response Outcome 2: Sustainable & integrated urban & rural settlements. Increase housing opportunities Improved settlement functionality, efficiencies and resilience Game Changers	Outcome 1: Improve the quality of basic education. Outcome 4: Decent employment through inclusive growth Outcome 6: Efficient, competitive and responsive economic infrastructure network Outcome 8: Sustainable human settlements and improved quality of household

		Water for sustainable growth and development Water & sanitation- basic services	
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Table 2: Strategic alignment of the three spheres government

Table 3: Strategic alignment of the three spheres government

Kannaland Objectives	Eden District Objectives	PSO	NDP Objectives / Outcomes
Creating opportunities for growth and development in rural areas (11)		Outcome 7: Vibrant, equitable and sustainable rural communities and food security	
KPA5: To promote efficient and effective Governance with high levels of stakeholder participation	Promote good governance (5)	Building the best-run regional government in the world (12)	Outcome 9: A responsive and, accountable, effective and efficient local government system Outcome 12: A development-orientated public service and inclusive citizenship
KPA 6: To provide an efficient workforce by aligning our institutional arrangements to our overall strategy	Build a capacitated workforce and communities (2)	Mainstreaming sustainability and optimising resource-use efficiency (7)	Outcome 5: A skilled and capable workforce to support inclusive growth
KPA 7: To strive towards a financially sustainable municipality	Ensure financial viability of the Eden district municipality (6)	Building the best-run regional government in the world (12)	Outcome 9: A responsive and, accountable, effective and efficient local government system

1.9 PSP 2014-2019: Provincial Strategic Goals (PSGs)

Draft



STRATEGIC GOAL 1:
Create
opportunities for
growth and jobs



STRATEGIC GOAL 2:
Improve education
outcomes and
opportunities for
youth development



STRATEGIC GOAL 3:
Increase wellness,
safety and tackle
social ills



STRATEGIC GOAL 4:
Build a quality living
environment,
resilient to climate
change

**STRATEGIC GOAL 5: Embed good governance and integrated service
delivery through partnerships and spatial alignment**

2. KANNALAND OVERVIEW

2.1 Municipal Area and Community Profile

Kannaland municipal area is situated in the jurisdiction area of the Eden District Municipality. The municipal area is bordered in the west by Overberg District, in the east by the Oudtshoorn municipality, in the north by Central Karoo District and in the south by Hessequa municipality (refers to **Figure 1**).

The Kannaland municipal area lies huddled between two mountain ranges, the Swartberge and Anysberg. Kannaland Local Municipality is classified as a Category B municipality and is responsible for basic service provision to the towns of Calitzdorp, Ladismith, Van Wyksdorp and Zoar, as well as the surrounding farming communities. The municipality is situated about 340km north-east of Cape Town along the famous tourism Route 62. It is linked by tarred main roads to all other major centres, such as Oudtshoorn (100km), Montagu (139km), George (160km) and Mosselbay (185km).

The municipality has the smallest population in the Eden District, and also has the smallest economy in the region. Kannaland's climate is ideal for the production of apricots, peaches, plums, nectarines and grapes. The well-known Parmalat and Ladismith dairy products come from the area. The quaint little haven of Calitzdorp is known as the port-wine capitol of South Africa by virtue of the top quality wines, produced mainly by Boplaas, De Krans, Axehill and Calitzdorp wine cellars. Kannaland has its own individual building style, which makes it unique. For example, the so-called Ladismith Style is a simplified Georgian design and dates from the 1830s. Kannaland is an integral part of the Eden District, along with six other municipalities, namely Hessequa, Mosselbay, George, Oudtshoorn, Knysna and Kannaland.

As oppose to other municipalities in the district, Kannaland Municipality does not have a diverse economy, with agriculture and forestry being the largest employment sector.

There are however, significant initiatives in the broader Eden District Municipality which may in the longer term benefit the economic base of Kannaland. Main Economic Sectors: Agriculture (26.8%), manufacturing (20.4%), community and personal services (18.4%), finance and business (11%), wholesale, retail and trade (9.4%), construction (6.20%), electricity and water (4.70%), transport and communication (3%).

2.2 Vision

To be the place of choice

2.3 Development Trends in the Municipality

A number of trends were identified during the Joint Planning Initiative (JPI) analysis of the socio economic reality for the Kannaland region. These trends can be summarized in the following development areas from input from sector departments:

2.4 Infrastructure/ Basic Service Delivery Backlogs

Low levels of access to the minimum basic service in refuse removal and sanitation are of concern. These need to be addressed in order to enhance the quality of life of individuals and to stimulate economic activity which may be hampered as a result of these backlogs. Current budget allocations may be insufficient to address backlogs.

2.5 Economic Development

Economic growth over the period 2001 to 2010 averaged 5.63 per cent per annum whilst real GDP-R per capita increased from R16 438 in 2001 to R26 043 in 2010. Agriculture and agro-processing sectors along with limited tourism prospects are highlighted.

2.5.1 Service Delivery Challenges

The demand-driven nature of the work and the support interventions provided by the department (like, access to finance for enterprises) is dependent on uptake by the private sector and the demand generated by businesses and citizens to equip them for economic improvement. This is based on the extract from the Joint Planning Initiative (JPI) Provincial Consolidated Report for Kannaland Municipality 2014.

It is also necessary for the Municipality to be able to identify key areas of challenge where the economic interventions which the department provides can be taken up. The Municipality must therefore be equipped for Local Economic Development (LED) sensitivities and be able to articulate the support needed from the department.

2.5.2 Critical Interventions

Joint ventures can potentially occur in the areas of:

- ❖ Skills Development
- ❖ Red Tape Reduction
- ❖ Entrepreneurship
- ❖ Trade/Sector development

Transversal participatory assessment in the Local Economic Development (LED) and in its implementation plan is required to stimulate economic development that will improve municipal performance and maturity to deal with the economic development objectives of the area.

Collaboration with the local private sector in order to unlock the local economy and establish what local businesses require in localities to unlock economic production, competitiveness and opportunities for labour absorption. Using partnerships and joint collaboration with the local private industry players, there is a need to focus on developing or expanding priority sectors with potential – In Kentland the development

of the Agro-processing and Tourism sectors are to be prioritized for its labour-absorbing potential. Potential levers also include skills development, red tape reduction and enterprise support programs.

2.6 Social Development

Kannaland LM, with an estimated median age of 28, 3 years in 2014, has a younger population than the Western Cape (29, 2) and Eden District (30, 1). The process of population ageing predicted for the Western Cape and Kannaland follows this trend with the median age projected to increase to 31, 0 years in 2030. The overall dependency ratio is predicted to decline from 55, 6 in 2014 to 53, and 5 in 2030.

Relative to the working age population, those 14 years and younger are predicted to decrease so that the young dependency ratio falls from 42, 9 in 2014 to 36, and 5 in 2030. Those 65 years and older are expected, in contrast, to increase in proportion to the working age population with the old age dependency ratio rising from 12,7 in 2014 to reach in 17,0 in 2030. In 2014 it was estimated that there were 93, 3 males for every 100 females in Kannaland LM. In 2030 the sex ratio is expected to decline to 90, 8 males per 100 females.

The following areas were identified by the Department of Social Development as service delivery challenges.

- ❖ High level of education,
- ❖ School drop-out of youth,
- ❖ Poverty,
- ❖ Substance abuse that have an enormous impact on all levels and spheres of the society as a whole.
- ❖ Crime is also a challenge as especially domestic violence.

2.7 Demographic Characteristics

2.7.1 Population

The table below indicates that in 2001 there was a total population of 22 821 and in 2011 a total population of 24 767 in the area. The annual growth rate of the population between 2001 and 2011 was 0.85%. This positive growth rate indicates that more people are settling in the municipality, but at a very slow rate. The municipality has a relatively young population with the highest number of unemployment between the ages of 15-30 years. This remains a critical area for the municipality to focus on particularly in partnership with its social partners (Government and NGO's) and in the context of its economic and social development programs.

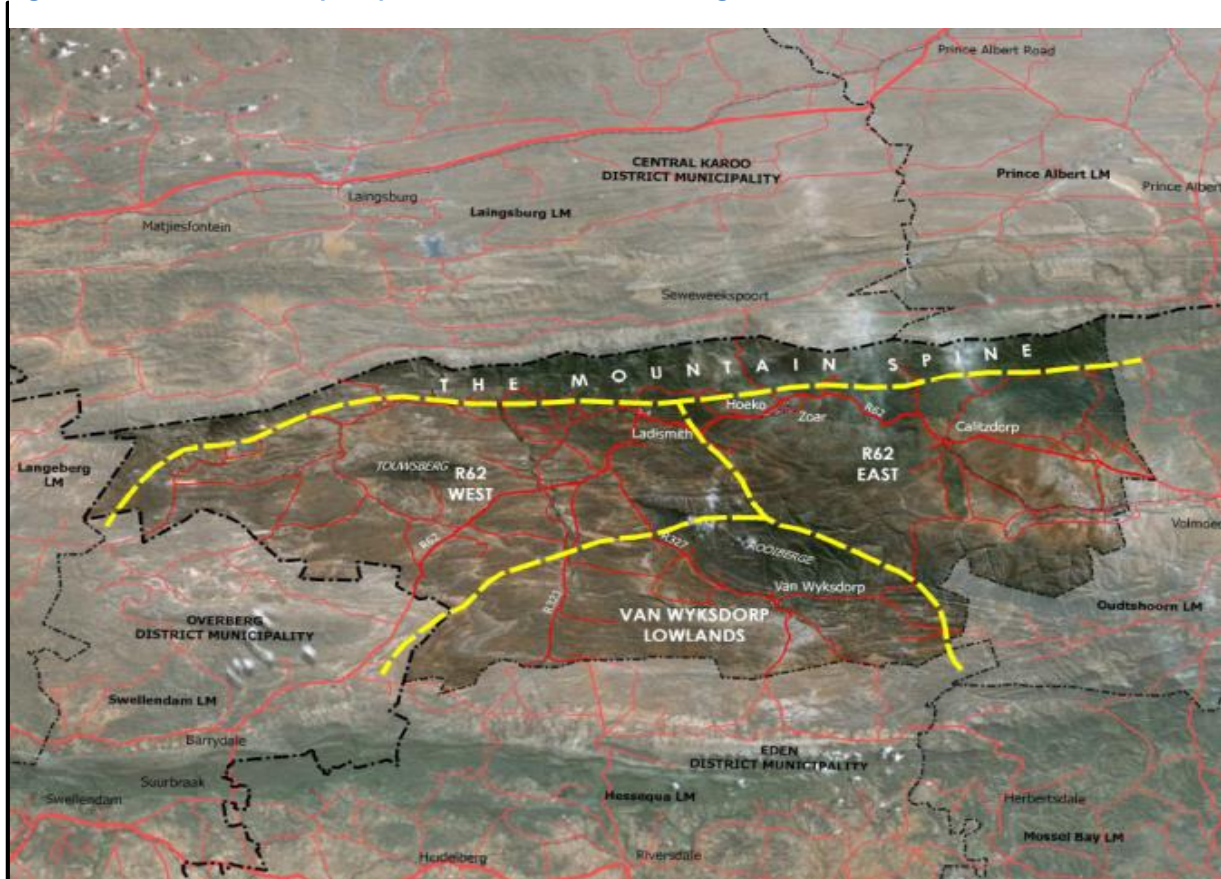
	Census 2001	Census 2011	Growth Rate
Population	22821	24767	0,85%

Table 3: 2001-2011 Population Census information

Implication of population growth on Human Settlements:

The implication of slow population growth for the municipality has got divers effect be it on the economy, infrastructure or even housing needs. It is also however important to acknowledge other effect of population growth rate other than housing, but for the purpose of this plan we will focus more attention on human settlements needs.

Figure 1: Kannaland locality map in relation to the surrounding areas



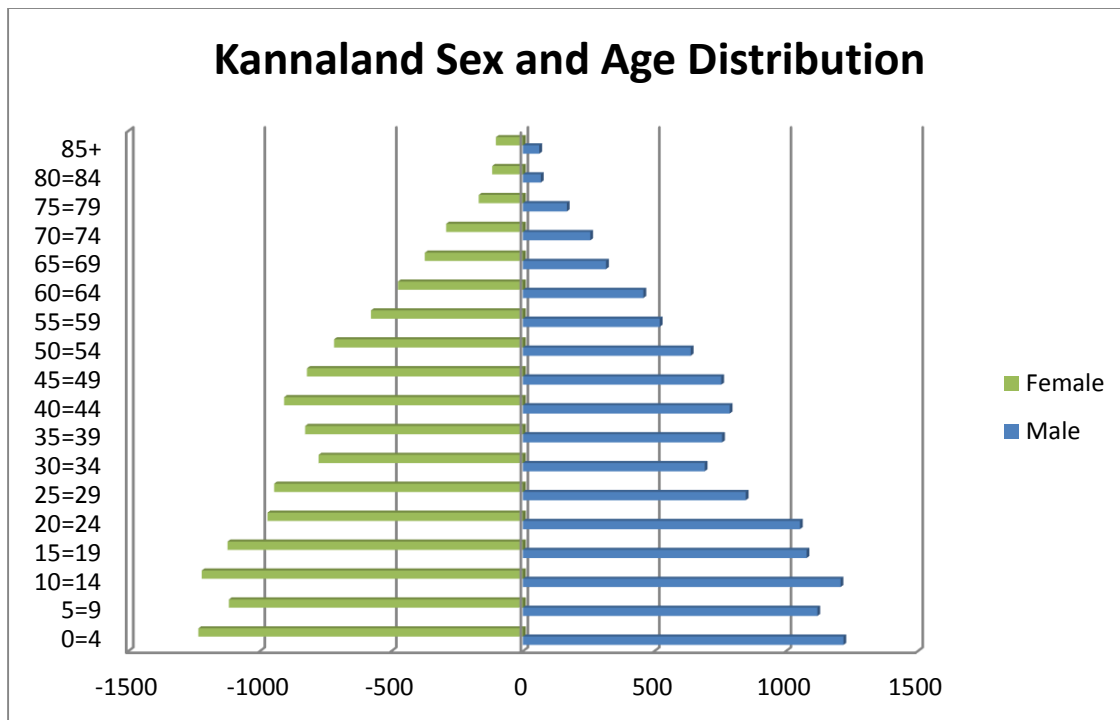


Figure 2: 2011 Sex Distributions according to Age classification

There seem to be an even distribution between female and male within the Municipality. Majority of the population is aged between 0 and 29 years old. The above graph presents a good indication that more people are within the workforce age.

Implication of Sex and Age distribution on Human settlements:

Majority of the residents are still capable of entering the workforce as they aged between 19 and 60 years. This implies that the future demand for housing would decline as residents will be able to afford their own homes if the municipal economy creates job opportunities to absorb the work force.

2.7.2 Households

The 2011 census information indicated that in general, the Kannaland income levels of households are in the lower middle-income categories. The majority of households earn between R800 and R12 800 per month. The table below shows the household income per different income category. This indicates that approximately 55% of households earned less than R4 800 per month in 2011. Almost 67% of households in the municipal area earned between R800 and R6 400 per month and approximately 8% of the households did not receive any form of income in 2011.

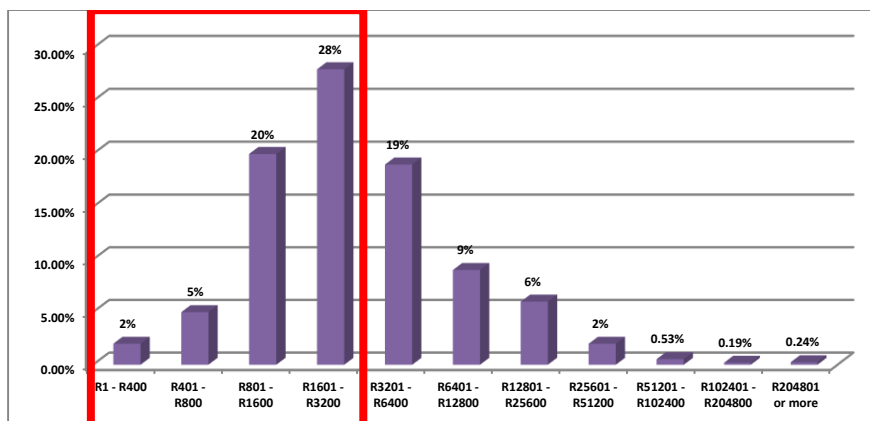


Figure 3: Kannaland household income distribution (Census 2011)

Implication of low to medium income households on Human settlement:

Having over 55% of the households earning less the R3500 bracket will impact on the demand for as more and more people will rely on subsidised housing. Furthermore the percentage rate payers in relation to non-rate payers are low which impacts on financial sustainability of the municipality.

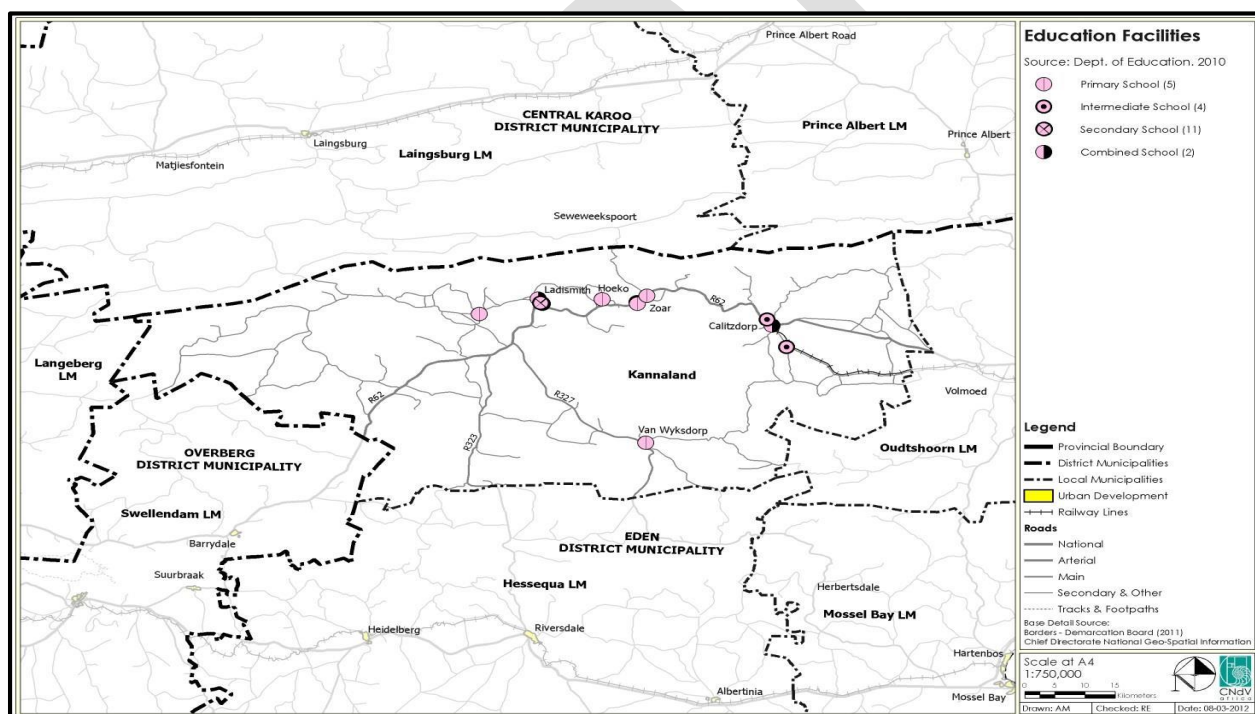


Figure 4: Locality map of educational facilities within Kannaland Municipality

2.7.3 Educational Levels

It is evident from the table below more toddlers were enrolled into the education system with a decline in the no schooling statistics. Furthermore, the table also displays a decline in further educational training however; there has been an increase in the number of pupils enrolled for Grade 12.

Level of Education	2001	2011
--------------------	------	------

No schooling	1660	1115
Some primary schooling	4378	7550
Completed primary school	1634	2033
Some secondary school	3826	7312
Grade 12	1683	3016
Higher education	766	656

Table 4: Level of education distribution in Kannaland Municipality (Census 2011)

Educational facilities are largely clustered around the settlements of Ladismith, Calitzdorp, Van Wyksdorp and Zoar (figure 4). No educational facilities are available in Anysberg and Plathuis in the west and in Kraaldorings, Badshoogte and Vleirivier in the eastern parts of the municipality.

Implication of Educational levels on Human Settlements:

The current school amenities are meeting the current demand in terms of pupils attending school within municipality. The clustering of schools amenities around a particular area will ultimately result in an influx of people in that particular area.

2.7.4 Employment and Unemployment

The table below indicates that there has been a slight increase in the labour force between 1996 and 2011. The labour force participation rate also decreased between 1996 and 2001 and then decreased to approximately 48% in 2011. This indicates that less than half of the total work force between the ages of 15 and 65 are employed or actively seeking employment. The table also indicates that there were a total of 6344 people employed in 1996. This figure increased to 6345 in 2001 and decreased to 6271 in 2011. This is noteworthy since the labour force decreased by 74 people.

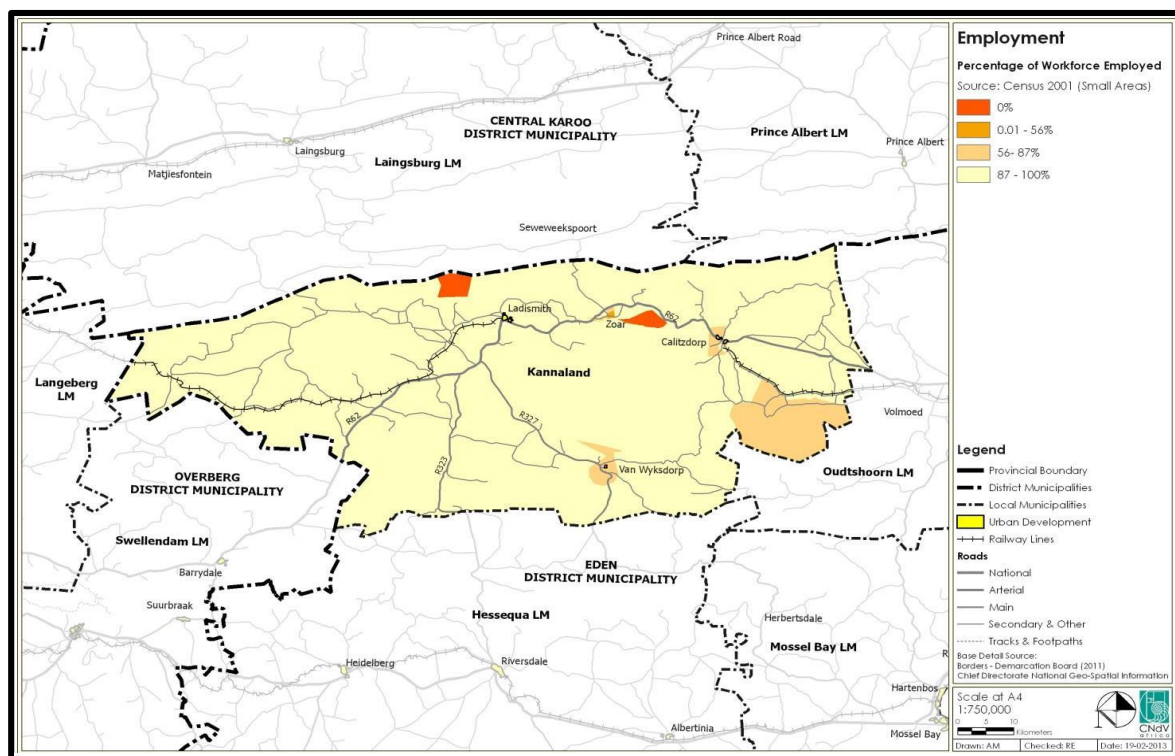


Figure 5: Workforce distribution within Kannaland Municipality (Census 2011)

Census Data	Total Population aged 15-65	Labour force	LFPR%	Employed	Unemployed	Unemployment rate (%)
1996	11909	7405	62.2	6344	1061	14.3
2001	14622	7365	50.4	6345	1020	13.8
2011	15728	7587	48.2	6271	1316	17.3

Table 5: Employment status comparison between 2001 & 2011 Census

Implication of Educational levels on Human settlements:

The Kannaland Municipality has experienced large job losses in especially the agricultural sector. This has in turn led to increasing unemployment rates. Kannaland Municipality has the second highest unemployment rate in the District. This is of concern considering the high poverty rates in the area. The implication of increase in unemployment in Kannaland means more residents will become dependent of on government grant and housing subsidy hence the demand for housing opportunities will continue to increase.

In terms of skill development there are extremely high average dropout rates in the municipal area which need to be addressed. The literacy rates are also the lowest in the District. Considering the trends towards employing skilled and highly skilled individuals they may become an increasing concern.

Growth Potential of Towns

The Growth Potential Study of Towns in the Western Cape (2010) scored Ladismit with a low growth rate potential. Zoar and Calitzdorp scored a very low growth potential, respectively, while Van Wyksdorp was not included in this study. Kannaland is the only municipality within the Eden District that is scored with a very low growth potential. Knysna, George and Mossel Bay, the other major urban centres within the region are scored with a very high potential growth rate. Table 5 below provides a summary of the growth potential of each settlement, in relation to economic, natural, infrastructure and institutional potential.

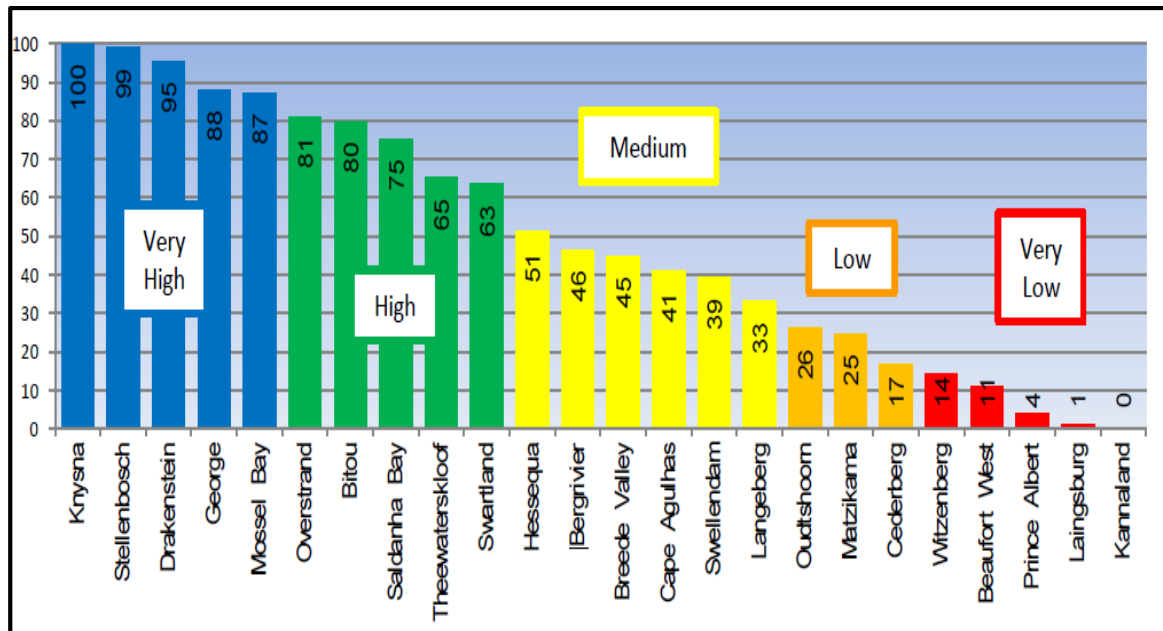


Figure 6: Potential Growth of Town Study (Western Cape)

Implication of slow employment growth on Human settlements:

As mentioned above Kannaland has a very low growth potential in comparison with other municipalities. The municipality needs to find a niche in the market and exploit any feasible economic opportunities in order to counter this problem, as it could lead to job losses, increasing poverty, lower per capital income etc. within the municipal area. Although the potential growth rate is very low for the municipality the social demand is medium to high therefore Provision must nevertheless be made to accommodate this needs.

2.7.5 Opportunities for economic growth

Although declining, poverty rates are still high within Kannaland Municipality. With the large job losses there will be increasing indigent households placing strain on municipal resources to provide free basic services. A number of opportunities and interventions exist for economic growth and development, as set out in Kannaland's IDP and SDF.

2.8 Housing Waiting List per town

The following is an extract from the Housing Demand Database (WCHDD February 2016). It shows that Kannaland Municipality has a backlog of 3184 which equates to 5% of the District waiting list. The table below shows age distribution of housing backlog per town.

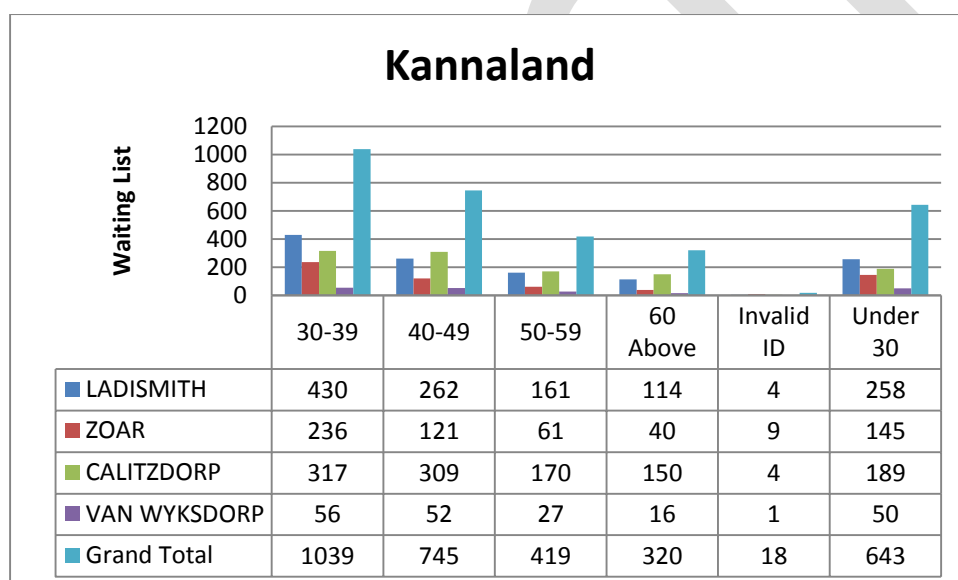


Figure 7: Housing Backlog distribution per age (February 2016 extract WCHDD)

The above table displays current housing demand within the Kannaland Municipality. It's evident that Ladismith has the highest demand for housing opportunities. Furthermore, an interesting statistic is that there are more young people in need for housing opportunities looking at the overall housing demand from the database.

Implication of high number young applicants for Human settlement opportunities:

With majority of the awaiting applicants ageing under 40 years is very concerning as provincial priority is to consider most desirable applicants first and thus makes the municipal projects to be on a low priority.

2.9 Informal Settlements

The recent informal settlement shack count and verification study conducted by the province to gather necessary planning and prioritisation information on the numbers, level of services, density and living conditions within the informal settlements geared towards informing municipalities of current status of the informal settlement within the municipal area. The information presented in Table 7 was extracted from the study:

Kannaland Informal Settlement Count		
Town	Informal Settlement Name	Shack Count
Ladismith	Unknown	206
Zoar	Unknown	45
Calitzdorp	Unknown	28
Van Wyksdorp	Unknown	27
TOTAL		306

Table 6: Informal settlement shack count (2015 Study)

Table 6 above displays a relatively even distribution of informal shacks in relation to the respective towns. Furthermore, the shack count is low which would make short term intervention and final upgrading easier.

3. ANALYTICAL PHASE

3.1 Kannaland Population Projection

Projected population of settlements within Kannaland based on a high growth scenario (0.8% growth rate per annum), a medium growth scenario (0.6% p.a.) and low growth scenario (0.44% p.a.)

The stakeholder workshop held 4th February 2016, the population projection growth of Ladismith and Calitzdorp are anticipated to only growth at medium rate (**0.6%**) while Zoar and Van Wyksdorp are said to be low growth (**0.44%**). For the projected analysis, the scenario of the combination of medium and low growth will be adopted for this document.

Based on the above various growth scenarios, corresponding housing and land requirements have been calculated. It is assumed that 3 people per household to occupy a dwelling unit and that the average future gross dwelling unit density will be 40 dwelling units per hectare.

POPULATION PROJECTIONS - UP TO 2035 (FOR HIGH, MEDIUM AND LOW GROWTH SCENARIO)				
Settlement	Population (2011)	Projected Population 2035		
		High Growth Scenario (0.85%)	Medium Growth Scenario (0.6%)	Low Growth Scenario (0.44%)
Ladismith	7123	8727	8223	7915 0.6

Zoar	4659	5708	5378	51770
Calitzdorp	4283	5248	4944	47590
Van Wyksdorp	833	1021	962	926
Non-Urban	7869	9641	9084	8743
Total	24767	30346	28591	27519

Table 7: 2035 Projected Population Figures

The following observations can be made regarding the future population projections:

Under the 'high growth' scenario, Kannaland is projected to grow from **24 767** people in 2011 to **30 346** in 2035, if it sustains the current development patterns and same average growth rate of **0.85%** per annum for all its settlements. It is expected that this is an overly-optimistic growth rate and that current growth rates will not be sustained until 2035.

Under the 'low growth' scenario, Kannaland is projected to grow from **24 767** people in 2011 to **27 519** in 2035, if it experiences a growth rate of **0.44%** per annum. It is anticipated that this growth rate is too conservative, given the significant influx of people and resultant population growth that this municipality is experiencing.

Under the 'medium growth' scenario (**0.6%**), Kannaland is projected to grow from **24 767** in 2011 to **28 591** in 2035.

HOUSEHOLD PROJECTIONS - UP TO 2035 (*assuming 3 people per household (2011 Census))								
LAND PROJECTIONS - UP TO 2035								
(Future land requirements for new housing, assuming a future gross dwelling unit of 40du/ha)								
Settlement	No of households (2011)	New households between 2015 - 2035			Land Required by 2035 (ha)			
		High Growth Scenario (0.85%)	Medium Growth Scenario (0.6%)	Low Growth Scenario (0.44%)	High Growth Scenario (0.85%)	Medium Growth Scenario (0.6%)	Low Growth Scenario (0.44%)	
Ladismith	2071	2296	2163	2082	2163	2082	2082	
Zoar	1226	1502	1415	1362	1415	1362	1362	
Ladismith	1874	2296	2163	2082	91	86.5	83	
Calitzdorp	1127	1381	1301	1252	1301	1252	1252	
Zoar	1226	1502	1415	1362	60	56.6	55	
Van Wyksdorp	219	268	253	243	253	243	243	
Calitzdorp	1127	1381	1301	1252	55	52	50	
Non-Urban	2071	2537	2391	2301	2391	2301	2301	
Van Wyksdorp	219	268	253	243	10.7	10	9.7	
Total	6517	7985	7513	7241	7513	7241	7241	
Non-Urban	2071	2537	2391	2301	101.5	95.6	92	
Total	6517	7985	7513	7241	319.4	300.5	289.6	

Table 8: 2035 household projections

Table 9: Land requirement for different population projections

3.2 Human Settlement Housing Demand Projections and Analysis (Current)

Using the medium growth rate, table 12 below shows housing demand projection of the February 2016 housing waiting list extracted from the Western Cape Housing Demand Database (WCHDDDB). As the 'medium growth' scenario was adopted for the population estimates, the following sets out the projected number of housing demand in each settlements within Kannaland base on subsidy housing demand database (WCHDDDB).

Subsidy Housing Demand Projection 2035								
Town	Age classification of housing demand waiting list						Current Total HS Demand	Projected Subsidy Housing Demand
	30-39	40-49	50-59	60 Above	Invalid ID	Under 30		
Ladismith	430	262	161	114	4	258	1229	1419
Zoar	236	121	61	40	9	145	612	674
Calitzdorp	317	309	170	150	4	189	1139	1315
Van Wyksdorp	56	52	27	16	1	50	202	222
Municipal Total	1039	745	419	320	18	643	3184	3629

Table 10: Current housing demand and projected demand (2035) for subsidy housing

3.3 Informal

Settlements Projection

Using the medium growth scenario to project informal settlements growth in Kannaland municipality, the informal settlement is anticipated to grow from current 306 to 353 by 2035 if no intervention. However it is very important to note that the rate at which informal settlements grow is dependent on various factors which in most cases prove to be higher than normal population growth rate. The verification process to determine and confirm the status of all identified informal settlements is complete 2015. Table below presents the informal settlement shack count and relative projection for 2035.

Informal Settlements Growth Projection per town 2035			
	Informal Settlement Name	Shack Count	Projected growth of Informal Settlement (0.6%)2035
Ladismith	A	206	238
Zoar	B	45	52
Calitzdorp	C	28	32
Van Wyksdorp	D	27	31
Total		306	353

Table 11: Kannaland informal settlements growth projections

3.4 Land Requirement for

Subsidy Housing Demand Projections 2035

Projected Subsidy Housing Land Requirement (2035)				
	Projected Demand 2035	Current Housing Pipeline Opportunities	HS Demand Shortfalls	Land requirement
Ladismith	1419	850	569	14.22
Zoar	674	144	530	13.25
Calitzdorp	1315	821	494	12.35
Van Wyksdorp	222	100	122	3.05
Municipal Total	3629	1943	1715	42.87

Table 12: Projected land requirement for housing opportunities up till 2035

Base on the above various growth scenarios, corresponding housing and land requirements have been calculated. It is assumed that 3 people will occupy a dwelling unit and that the average future gross dwelling unit density will be **40 dwelling units per hectare**. A total of **42.87** hectare will be required for subsidy housing to accommodate the projected future subsidy housing demand (2035).

3.5 Implication of the demographic analysis for Kannaland Municipality

Transversal and Partnering Engagements	Implication of the demographic analysis on the Municipality	Strategy (Stakeholder engagement to agree on strategy) Municipality, DoHS, DEADP etc. Strategic recommendations to meet the challenges emanating from the HSP analysis
Municipality to facilitate and foster partnership	Population growth / Migration: With the slow/steady influx of people within the settlement, the demand for basic services will also increase. The Infrastructure and socio facility capacity needs to be investigated in order to determine the impact on the current or future demand.	To provide access and updated Plans that will contribute to improve quality of life of current and future population. Alignment of all plans such as infrastructure Master Plan (water, sewer, storm water, and electricity), SDF, HSP thereof incorporated into the IDP.
Municipality to facilitate and foster partnership	Sex and age distribution: Majority of the residents are still capable of entering the workforce as they aged between 19 and 60 years. This implies that the future demand for housing would decline as residents will be able to afford their own homes if the economic grows to absorb the work force	Municipality to provide enable environment to retain and attract business to boost the economy and promote employment opportunities.
Municipality to facilitate and foster partnership	Household Income: Having over 55% of the households earning less the R3200 bracket will impact on municipal resources as higher number of the population will rely on subsidies. Furthermore the percentages of rate payers in relation to non-rate payers are low which impacts on the sustainability of the municipality.	- Forward planning initiative to guide strategic direction of the municipality as to how human settlement projects should be implemented - Economic and skill development initiatives is paramount for - Promoting and attracting investment into the municipality through LED mechanism and implementation of initiatives identified
Municipality to facilitate and foster partnership with Dept. of Education	Educational Levels: The current school amenities are meeting the current demand in terms of pupils attending school within municipality. The clustering of schools amenities around a particular area will ultimately result in an influx of people in that particular area.	- Improve current educational facilities to encourage further learning and skills development - Department of Education/Public Works in conjunction with the municipality to investigate the possibility of developing a secondary school or alternative option for Van Wyksdorp
Municipality to facilitate and foster partnership Dept. of Local	Employment Status: Unemployment is increasing, meaning more residents will rely on government subsidies thus increasing the burden on the municipality.	To facilitate economic growth development through pursuing initiatives identified in the local LED strategy such as diversification of municipal economic base to include tourism, construction and other services.

Economic Development and private sectors		• Municipality to investigate opportunities to stimulate economic growth through the LED initiatives and rural development (tourism, agriculture, manufacturing and processing). • LED strategy to support human settlement development and should be used as the catalyst for local economic development and skills transfer. • Skill development Initiatives and programmes to be investigated through the LED to encourage local business; industries and other institutions to be involved in capacitating local residents. • Solid waste management to be investigated as form of economic development or employment opportunity. (recycling initiative)
Municipality to facilitate and foster partnership with Treasury, DEADP, DEDAT NGO, Private etc.	Growth Potential of Towns: Although the potential growth rate is low for Kannaland Municipality the social demand is medium to high therefore provision must be made to accommodate this need. Although NDP and PSG states that investment should be limited in small settlements	• Social needs of the municipality to be considered in human settlement planning by optimising human settlement instrument as a catalyst for economic growth. • Municipality with the assistance of sector departments to improve infrastructure capacity to support existing and potential future industries; farming and other economic activities. • Investment must be made to investigate LED programmes that could improve and encourage tourism in the municipality as part of economic growth. • Additional funding streams should be investigated to finance municipal projects.
Municipality to facilitate and foster partnership with Dept. of Human Settlements and other key role players	Subsidy Housing Backlog: With majority of the awaiting list ageing under 30 years old is concerning as priority should be given to the more desirable applicants which is the strategic drive of the province and thus put Kannaland in partisan situation for its development.	• Periodic and rigorous evaluation of the housing waiting list to prioritise the most deserving for human settlements opportunities. • Alternative technology to be investigated for infrastructure provision which could include solar; storage tanks etc. for new housing developments • Violent Prevention through Urban Upgrade (VPUU) initiative to be incorporated in new township establishment or housing development. • Enhanced service site to be promoted for the beneficiaries below the prioritised age limit and housing development should be utilised as economic catalyst, skills and job creation mechanism through EPWP process. • Facilitate creation of resilient and functional settlements

Table 13: Summary of municipal overview and strategy

3.6 Summary of Town Profiles: Kannaland Municipality Settlements, their main functions, economic base and locational advantages.

Settlement	Main Functions	Economic Base, Locational Advantages
Ladismith	Medium order service centre	Economic hub for the municipal area
		Recreational and community facilities
		Rural opportunities
		Retirement opportunities
Zoar	Medium order service centre	Agricultural Sector, Cultural Tourism market
Calitzdorp	Medium order agricultural service centre	Service based tourism, fishing and wine industries with supporting services and social infrastructure.
		Located adjacent a major arterial road Tourism attraction Community and recreational facilities
		High school Retirement opportunities
Van Wyksdorp	Medium order agricultural service centre	Residential town with supporting social infrastructure
		Community and recreational facilities Cultural Tourism market High school

Table 14: Summary of town profile

3.7 Summary of population, household and land required projection up until 2035.

Summary of Population, Household and Land Required Projections				
		Projected Population 2035	New households between 2015 - 2035	Land Required by 2035 (ha)

Settlement	Population (2011)	High Growth Scenario (0.85%)	Medium Growth Scenario (0.6%)	Low Growth Scenario (0.44%)	No of households (2011)	High Growth Scenario (0.85%)	Medium Growth Scenario (0.6%)	Low Growth Scenario (0.44%)	High Growth (0.85%)	Medium Growth (0.6%)	Low Growth (0.44%)
Ladismith	7123	8727	8223	7915 0.6	1874	2296	2163	2082	91	86.5	83
Zoar	4659	5708	5378	5177 0.44	1226	1502	1415	1362	60	56.6	55
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Van Wyksdorp	833	1021	962	926	219	268	253	243	10.7	10	9.7
Non-Urban	7869	9641	9084	8743	2071	2537	2391	2301	101.5	95.6	92
Total	24767	30346	28591	27519	6517	7985	7513	7241	319.4	300.5	289.6

Table 15: Summary of land requirement for population projections per town

3.8 Summary of current Human Settlement pipeline projects for Kanaland Municipality

Project Name/Description	Programme	Total No of Housing Opportunities	Earliest Implementation Year
3314 : Ladismith Parmalaat (280 services & 280 units) IRDP	IRDP	422	2018-19
3315 : Ladismith Schoongezicht GAP (170 services & 170 units) IRDP	IRDP	40	2018-19
3316 : Ladismith Showgrounds GAP (350 services & 350 units) IRDP	IRDP	350	2018-19
3320 : Ladismith Middleton Street Site GAP (78 services & 78 units) IRDP	IRDP	78	2018-19
3322 : Zoar Protea Park Infill (44 services & 44 units) IRDP	IRDP	44	Complete
3323 : Zoar Protea Park Rectification (100 units) RP	RP	56	2014 – 15
3321 : Zoar Protea Park Infill (100 units) IRDP	IRDP	100	2020-21
2703/1128 : Calitzdorp Bergsig (671 services & 671 units) IRDP	IRDP	692	2014/15 Remainder to move to 2016-17
xxxx : Calitzdorp Old Hospital Site (150 units) SH	Social Housing	150	2018-19
3324 : Van Wyksdorp Remainder Erf 110 (100 services & 100 units) IRDP	IRDP	100	2020-21

Table 16: Summary of current human settlements pipeline projects

3.9 Settlements Development Parameters

The process of human settlements planning consists of two primary components, namely Land Use Management and spatial Planning. Critical and often neglected facets of town planning, at the settlement and precinct scale, is on the one hand the need to ensure that adequate land is set aside for various facilities and services which are outside of traditional residential, commercial or industrial uses. To ensure that adequate settlement densities and appropriate urban forms are promoted is it important that land uses are integrated with accessibility and desirability of facilities optimally.

The resource allocation of government is largely underpinned by the understanding that resources are scarce, and capacity to implement is finite. As a result of this, facilities and resources are often placed in those areas where the greatest strategic impact will be realised. It is for this reason that higher-order, well-resourced and specialised facilities, such as tertiary hospitals, are placed in larger settlements whilst lower-order facilities, with fewer areas of specialisation, such as clinics, may be placed more frequently and in lower-order or smaller settlements, as well as the larger settlements.

Isolated, sparsely populated and low density areas like Kannaland are widely recognised as the most difficult and costly to provide services for due to the fact that it costs more to provide a service on a per capita basis where there are few people. As a result, these areas are often provided with the very basic, low-order services or even mobile services, in cases where providing a permanent service is not feasible. The following are key component to be considered for human settlement planning:

- ❖ Educational Facilities
- ❖ Health and Welfare Facilities
- ❖ Social and Cultural Facilities
- ❖ Public Service Facilities
- ❖ Recreational Facilities and Open Space
- ❖ Waste Management Facilities

All the above components have been carefully considered and analysed and only the identified social facilities with shortfalls as per the prescribed threshold from the Western Cape Development Parameters are captured in this report.

4. Ladismith

Ladismith is the administrative capital of the municipality and is home to the offices of the Kannaland Municipality, located along the R62 tourism route which holds significant economic benefits for the town. Nonetheless as R62 does not travel along the town's main activity centre but through Van Riebeeck Street, these doesn't allow the town to maximise the opportunities along the main road. Only a few restaurants and guest accommodation are situated on this route. Ladismith has a population size of 7123.

Broadly, the town can be divided into the historic central area (the Old Town) and the large low income areas to the east. The Old Town boasts a unique 'Ladismith' architectural style which, according to the SDF Status Quo, includes two Grade I and number of Grade II worthy buildings. The SDF Status Quo Report proposed that a heritage overlay zone should be developed for this part of the town.

The low income areas to the east of the Old Town include Nissenville and Sakkiesbaai. These areas are physically separated from the Old Town by the Parmalat Factory, low lying areas around a stream and a number of vacant properties. The urban quality of these areas is very different from the Old Town. The buildings are generally single residential dwellings, erf sizes are much smaller and the street layout is not in grid format.

The industrial sector of the town mainly comprises of two cheese factories namely Parmalat and Ladismith Cheese. The Municipal SDF identified the need to expand this area however additional electricity capacity is required in order to accommodate this. Ladismith has a reasonably diversified economy however the industrial sector is directly related to the agricultural sector including the production of fruit (grapes, apricots and plums), milk, wine, flowers and mutton.

Facilities offered in Ladismith include a combination school, secondary school and an intermediate school, a hospital, a clinic, a library, a caravan park, and a golf course. From the Potential Growth Study, Ladismith has been identified as having low development potential and medium social needs.

4.1.1 Challenges and potential emanating from the SDF:

- ❖ The towns should make greater use of its location on the R62.
- ❖ The nearby mountains offer opportunities for hiking and mountain biking.
- ❖ River corridor set-back lines should be established.
- ❖ Maintain existing tree line and extend along the major routes identified in the SDF.
- ❖ Restrict urban developed to within 1000m radius from Albert/Van Riebeeck Streets.
- ❖ Investigate a new development area around the base of the koppie in Nissenville. Retain the ridge line undeveloped.

4.1.2 Challenges and potential emanating from the status quo analysis:

- ❖ No project is currently ready for implementation for 2016/17 financial year.

4.1.3 Projects identified in the Spatial Development Framework:

- ❖ Ensure the properties abutting the R62, particularly at the entrances or 'gateways' to the town enhance the arrival experience. Appropriate landscaping and tree planting should create a sense of arrival.
- ❖ Appropriate signage should make motorists aware of an alternative route through the town.
- ❖ The establishment of a heritage conservation area is proposed for the town. Appropriate guidelines should be developed to ensure that any develop does not detract from the heritage quality of the area.
- ❖ Expand cemetery eastward and southwards.

4.1.4 Summary

The table 18 below illustrates the summary of Ladismith Land, bulk infrastructure, school and health facilities requirements to accommodate the projected future population land demand.

Land Availability	Educational Facilities	Bulk Infrastructure	Health Facilities
±86.5 ha of land are required for future projected housing need based on 40 dwelling units per hectare. However the SDF identify only ±26.86 ha of land for new development of which ±21.19 ha is already being allocated towards current projects on the pipeline. The SDF identified sites will conveniently accommodate the current subsidy housing demand but a shortfall of ±65.31 ha is required to accommodate overall future projected housing demand.	Intermediate and Secondary schools need to be upgraded to accommodate the future projected demand. Primary school also required.	Infrastructure needs to be upgraded. @ Water Source @ WTW @ Bulk supply ⊕ Raw water storage Ⓜ Reservoir capacity ⊕ WWTW Ⓜ Bulk sewer @ Storm water @ Electricity spare capacity	@ Sufficient
@ = Available Ⓜ = Reserved Capacity ⊕ = Capacity not available			

Table 17: Summary of Ladismith infrastructure capacity (IGP Report)

Note that the recommendations and comments are subject to the population projection and threshold standards attached as Annexure A, there are however some other factors that could potentially impact of the projections.

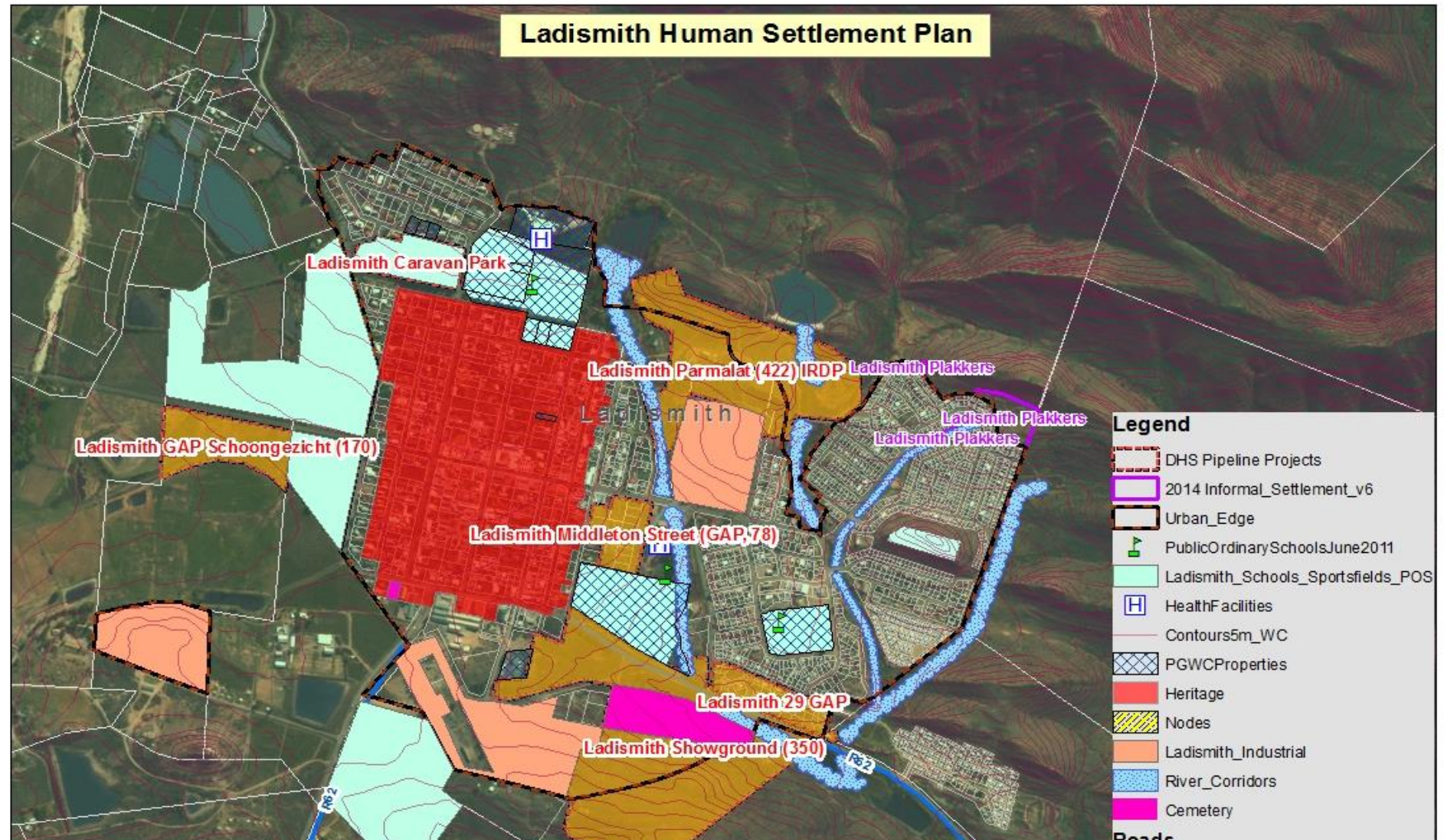


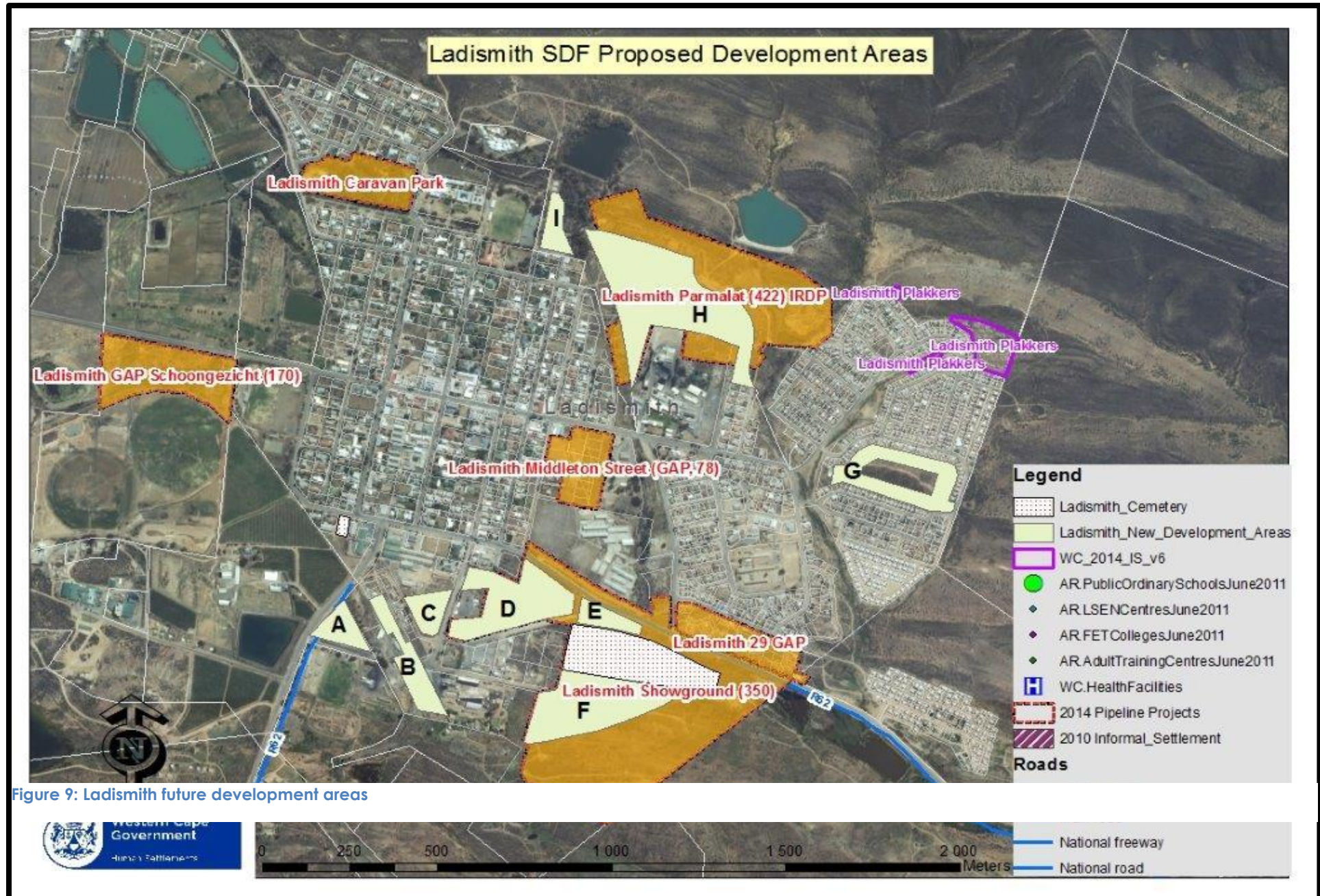
Figure 8: Ladismith locality map showing human settlements projects



Western Cape
Government
Human Settlements



— Main road
— National freeway
— National road



S/N	Project Name/ Description	No of Opportunities	DoHS Approval Status	Statutory Approval Status	Project Implementation Readiness
1	3314 : Ladismith Parmalaat (280 services & 280 units) IRDP	422	☒ Planning ☒ Conditional	☒ EIA ☒ LUPO	Ready Not ready
2	3315 : Ladismith Schoongezicht GAP (170 services & 170 units) IRDP (Erf 37/95)	40	☒ Planning ☒ Conditional	☒ EIA ☒ LUPO	Ready Not ready
3	3316 : Ladismith Showgrounds GAP (350 services & 350 units) IRDP (Remainder erf 95)	350	☒ Planning ☒ Conditional	☒ EIA ☒ LUPO	Ready Not ready
4	3320 : Ladismith Middleton Street Site GAP (78 services & 78 units) IRDP	78	☒ Planning ☒ Conditional	☒ EIA ☒ LUPO	Ready Not ready
☒ = Completed/Approved ☒ = In progress ☒ = Not yet submitted					

Table 18: Ladismith HS pipeline project readiness status

The table above represents projects on the current pipeline with their respective readiness status. **No** project is currently ready for implementation.

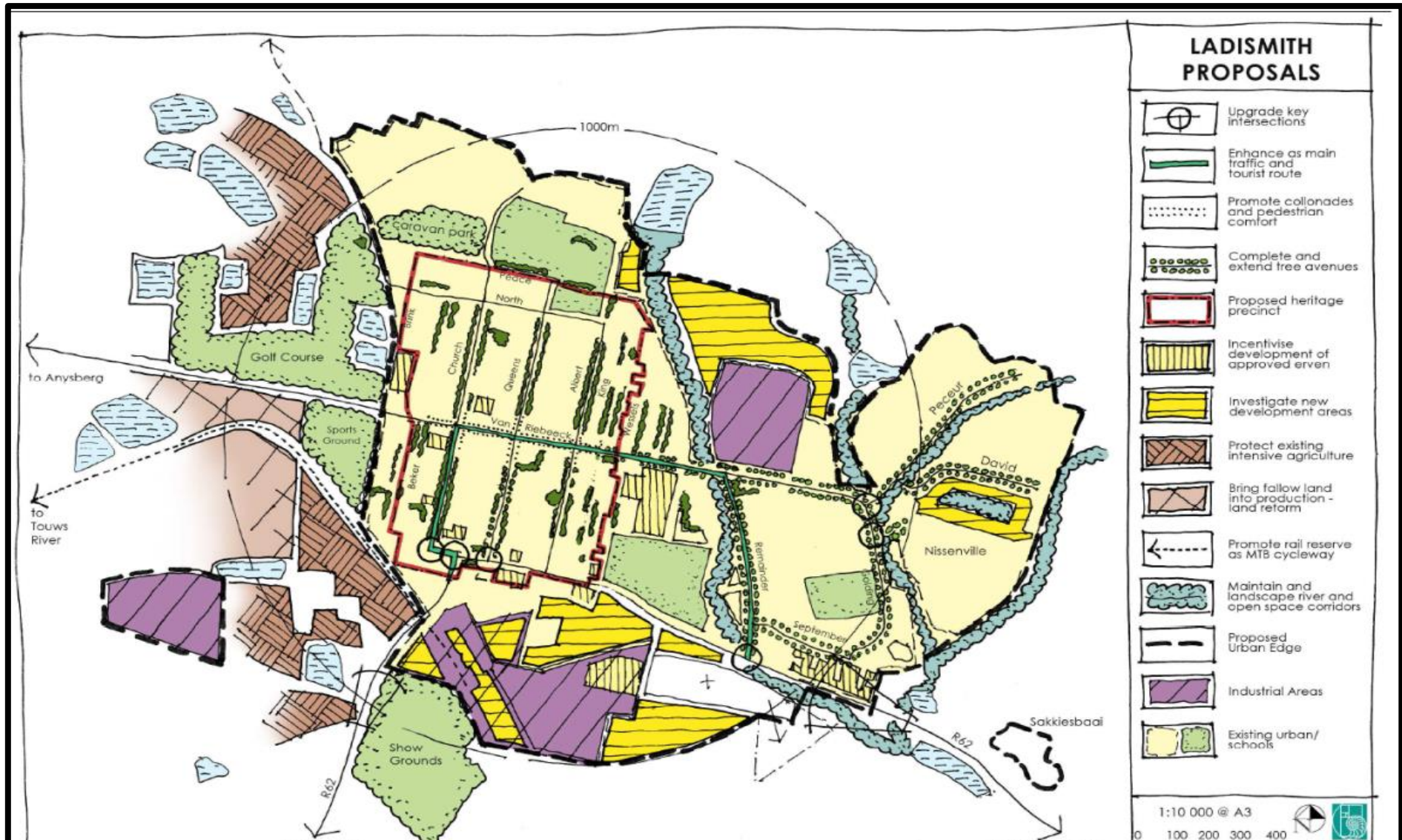
The projects listed below gives indication of property identified on the SDF for future development and represent a total of **±26.86ha** which is expected to yield about **±1020** housing opportunities if developed at average of 40 dwelling units per hectare. However,

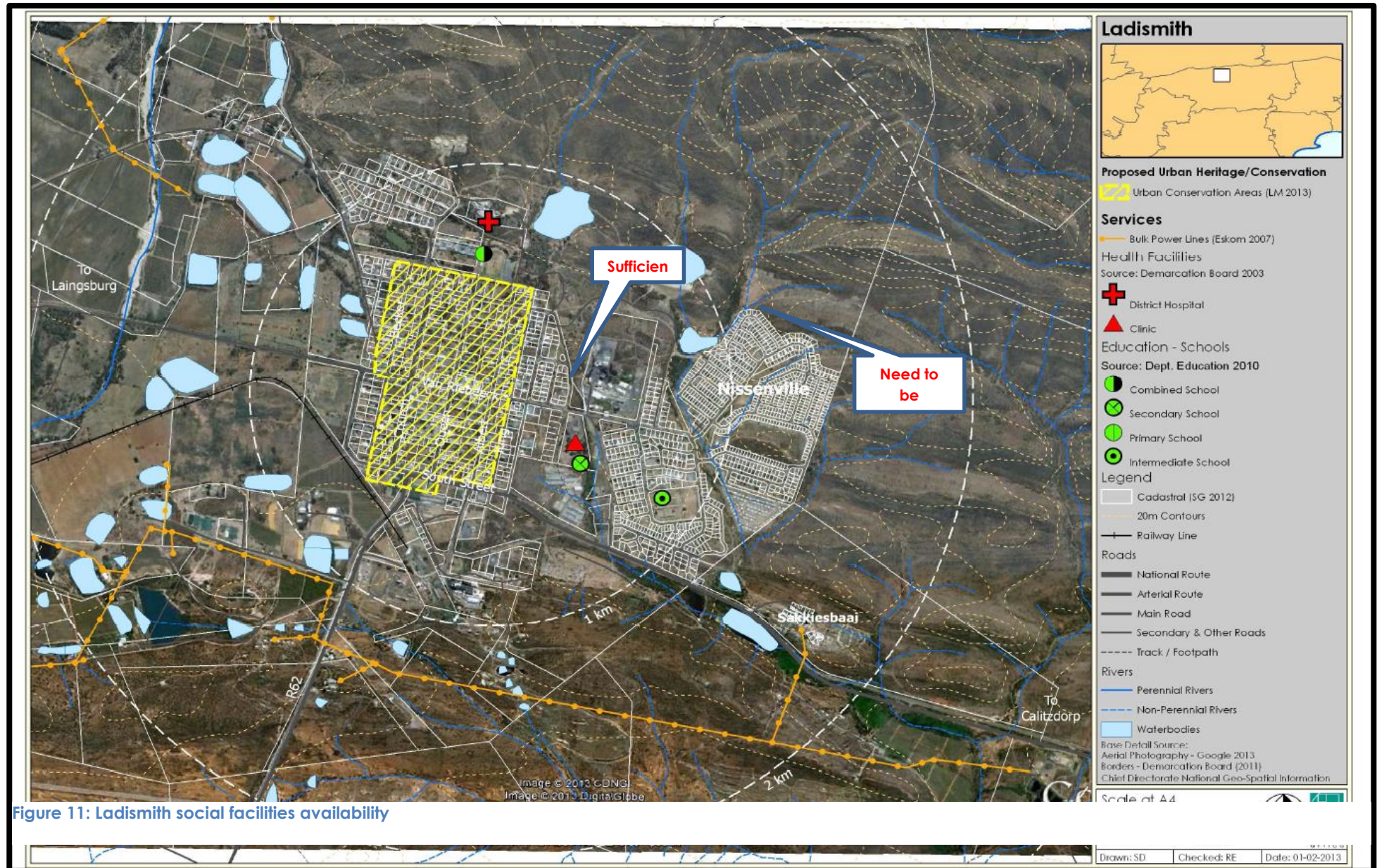
sites D, E, F and H of **figure 9 & table 21** contributes to the projects listed above in the pipeline thus leaving site A, B, C, G and I for future development. A total of **±5.67ha** is thus available for future settlement proposals within the SDF proposal.

Site	Erf No.	Property Owner	Size (ha)	Current Property Zoning	Potential No. of erven	Project Prioritization
A	Farm No 95 Portion 135	Kannaland Mun.	0.8	POS	32	TBD
B	Erf 1354/1355	Kannaland Mun.	3.54	POS	141.6	TBD
C	Erf 1360	Private	1.14	POS	45.6	TBD
D	Farm 95	Kannaland Mun.	4.6	POS	184	TBD
E	Farm 95	Kannaland Mun.	0.97	POS	38.8	TBD
F	Farm 95	Kannaland Mun.	5.64	POS	225.6	TBD
G	Erf 1551	Kannaland Mun.	5.19	POS	201	TBD
H	Farm 95	Kannaland Mun.	9.98	POS	399.2	TBD
I	Farm 95	Kannaland Mun.	0.99	POS	39.6	TBD
Total			26.86		107.44	

Table 19: Ladismith SDF identified property ownership and zoning status

Note: It has been decided that Site A and G is not viable / feasible options for future human settlement developments due to the onsite constraints which will make it expensive to developed the property.





4.2 Zoar

Zoar is located Between Ladismith and Calitzdorp along the R62, Zoar, and the neighbouring Amalienstein, were established as mission stations and as a result remain Act 9 Areas. Historically, Amaliestein terminated the Seweweekspoort (R363) to Laingsburg. Today Zoar is a dispersed rural settlement which lies along the Nels River and the R62.

The settlement layout reflects the historic development of the settlement. Initial developments have a close relationship with the Nels River as the primary source of livelihood was farming on garden plots irrigated by the river. Houses were built on the high ground freeing up the arable land in the flood plain and protecting the residents from flooding. This settlement pattern remains today and results in a unique layout that is tailored to the topography and which has considerable character and personality.

More recent developments have followed conventional civil engineering standards. This type of development offers little to enhancing the character and personality of the settlement.

The town offers very limited commercial and retail opportunities. The majority of which are located along Hoof Street which winds its way between Zoar and Amaliensein following the river. The town offers facilities such as schools, clinics, a library and sports fields.

Large areas of cultivated land are located along the Nels River and separate the residential area of Zoar. In addition, large sections of land around the Amalienstein farm and the R62 are still proclaimed Rural Areas in terms of the Rural Areas Act (Act 9 of 1987).

4.2.1 Challenges and potential emanating from the SDF:

- ❖ The Seweweekspoort Pass is a world heritage site. As indicated previously Amaliensein terminated the Sweweekspoort to Laingsburg. This is an important tourism route which Zoar is not taking advantage of.
- ❖ Flooding of the Nels River limits access to the residential area situated on the southern side of the river.
- ❖ The settlements are still governed by the Act 9 Area. This continues to remain a challenge for the Department of Rural Development & Land Reform.

4.2.2 Challenges and potential emanating from the status quo analysis:

- ❖ Huge water loses along the supply pipeline to reservoir Illegal connections
- ❖ Project not to proceed until the damaged houses are occupied
- ❖ Bulk is also a challenge however the project is also recommended for implementation after all damages houses are occupied and demand is still evident PPC resolution is that project to be implanted in 2020/2021 financial year

4.2.3 Projects identified in the Spatial Development Framework:

- ❖ The SDF proposed the development of a gateway at the intersection of the R62 and the R363. This will increase the visibility of the Seweweekspoort route.
- ❖ The SDF proposed the development of a periodic market at the intersection of the R62 and the R363.
- ❖ Development of a heritage precinct around the Amalienstein Mission.
- ❖ The SDF identifies three possible development areas. Generally, these areas aim to redirect urban development within the existing urban footprint so as to minimise travel distances of the residents and minimise the length of engineering services. One of these areas is situated on the southern side of the Nels River. It is not clear how the issue of access during flood times will be resolved.

4.2.4 Summary

The table below is a summary of Zoar Land, bulk infrastructure, school and health facilities required to accommodate the future demand.

Land required for projected opportunities	School Facilities	Bulk Infrastructure	Health Facilities
55 ha of land are required for future projected housing need based on 40 dwelling units per hectare. However the SDF identify only 9.61 of land for new development of which 23.34 ha is already being allocated towards current housing projects on the pipeline. The SDF identified sites will conveniently accommodate the current subsidy housing demand but a shortfall of 33.26 ha is required to accommodate overall future projected housing demand.	To accommodate the future population projection in Zoar the two Primary Schools and Intermediate schools need to be upgraded	Infrastructure needs to be upgraded. @ Water Source Ⓡ WTW Ⓡ Raw water storage @ Pumping capacity Ⓡ Reservoir capacity Ⓡ WWTW @ Bulk sewer @ Stormwater @ ESKOM supply area	@ Sufficient
@ = Available Ⓡ = Reserved Capacity Ⓡ = Capacity not available			

Table 20: Summary of Zoar Infrastructure Capacity (IGP Report)

Note that the recommendations and comments are subject to the population projection and threshold standards attached as Annexure A.

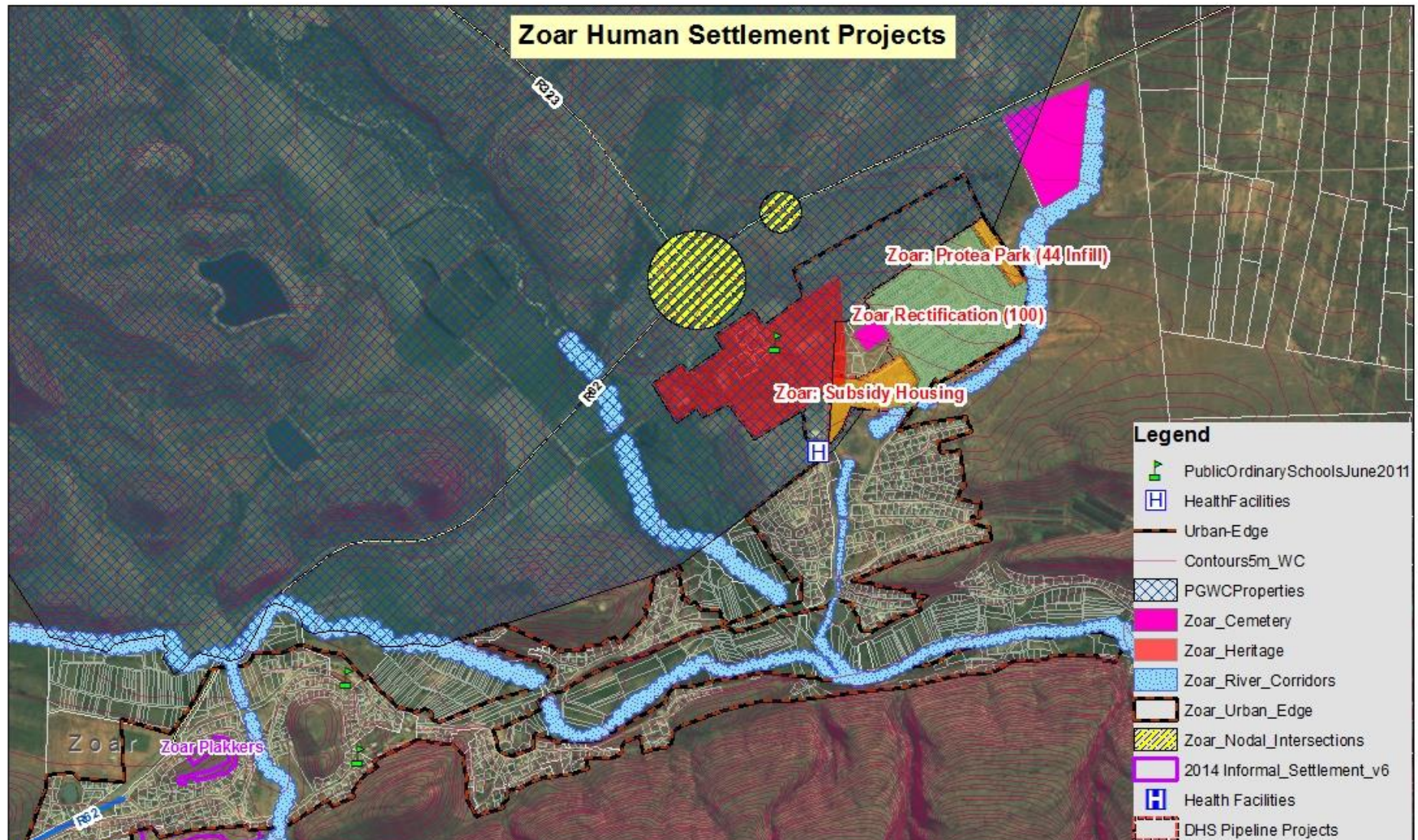
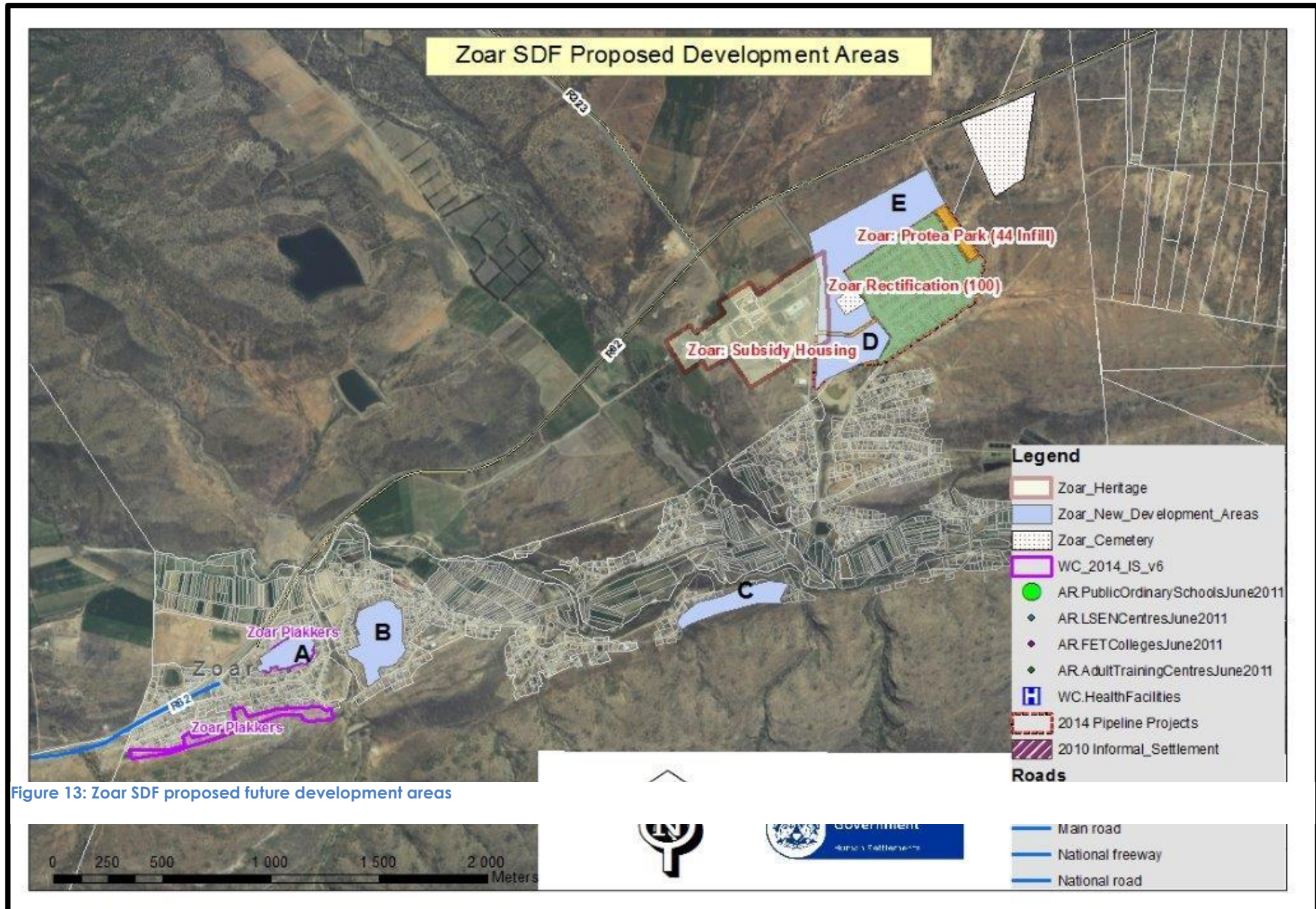


Figure 12: Zoar locality map showing human settlement projects





SN	Project Name/ Description	No of opportunities	DoHS Approval Status	Statutory Approval Status	Project Implementation Readiness
1	3322 – Zoar Protea Park Infill (44)	44	@Planning @Conditional	@ EIA @ LUPO	Complete
2	3323 – Zoar Protea Park Rectification (100)	100	ⓧ Planning ⓧ Conditional	@ Not Applicable	Ready Not ready
3	3321 – Zoar Protea Park Infill (100)	100	ⓧ Planning ⓧ Conditional	ⓧ EIA ⓧ LUPO	Ready Not ready
@ = Completed/Approved ⓧ = In progress ⓧ = Not yet submitted					

Table 21: Zoar HS pipeline project readiness status

The table above represents projects on the current pipeline with their respective readiness status. **3322 – Zoar Protea Park Infill (44)** is the only project currently ready for implementation.

The projects listed below gives indication of property identified on the SDF for future development and represent a total of **±9.61 ha** which is expected to yield about **±384.4** housing opportunities if developed at average of 40 dwelling units per hectare. However, sites D and E of **figure 13 & table 24** contributes to the projects listed above in the pipeline thus leaving site A, B, and C for future development. A total of **±13.68 ha** is thus available for future settlement proposals within the SDF proposal.

Site	Erf No.	Owner	Size (ha)	Property Zoning	Potential No. of erven	Project Prioritization
A	1416	Trust	2.76	POS	110.4	TBD
B	338 & 315	Trust	6.65	POS	241	Private Dev.
C	Farm 78	Provincial Govt.	4.27	POS	170.8	Private Dev.
D	1836; 1835 & 1834	Kannaland Mun.	1.98	POS	79.2	TBD
E	1508; 1506; 1509 & 1510	Kannaland Mun.	0.6	POS	24	TBD
E	Farm 64 Portion 4	Unknown	--			
Total			9.61		384.4	

Table 22: Zoar SDF identified property ownership and zoning information

Note: It has been decided that Site B is not viable / feasible options for future human settlement development due to the onsite constraints which will make it expensive to developed the property.

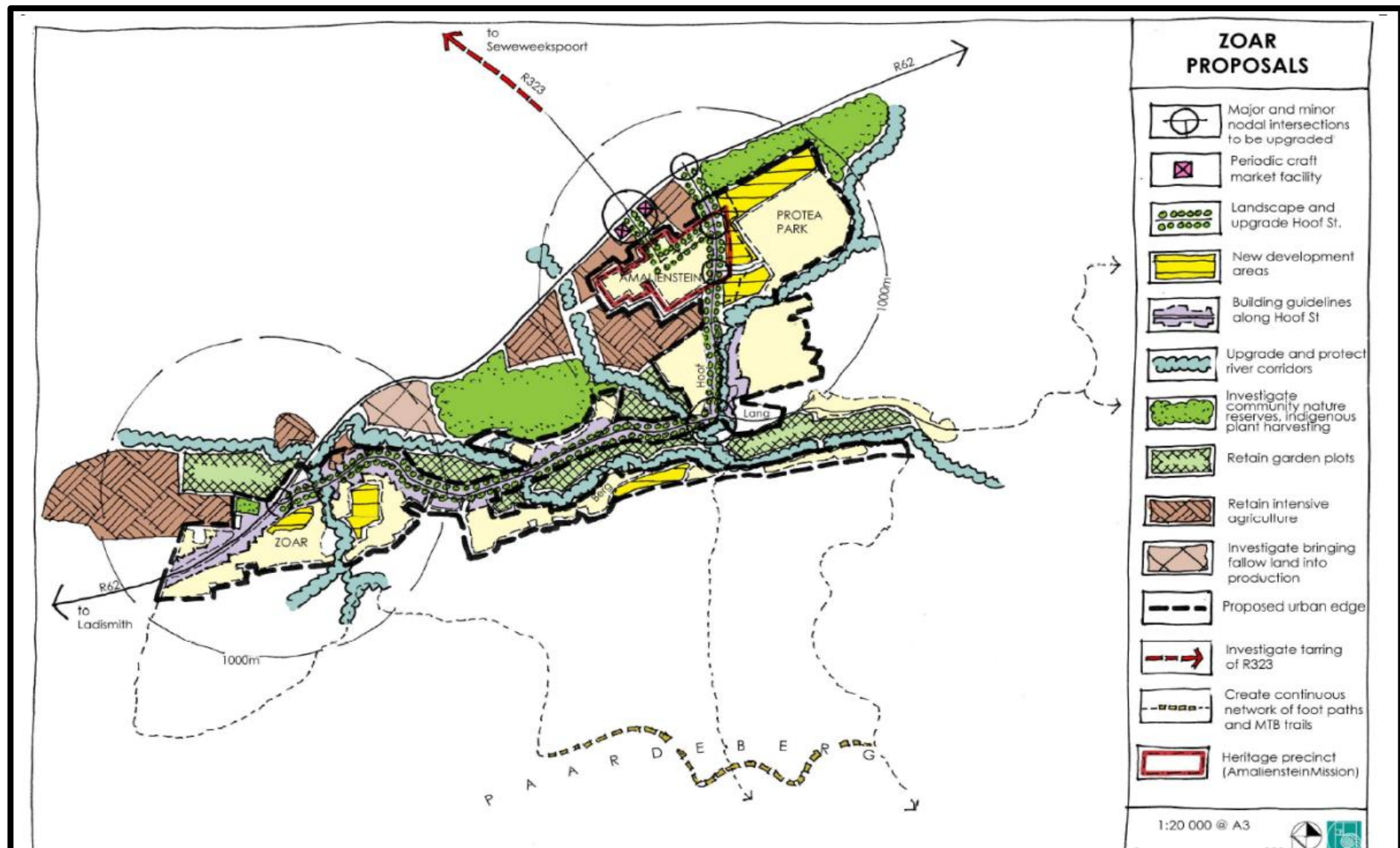
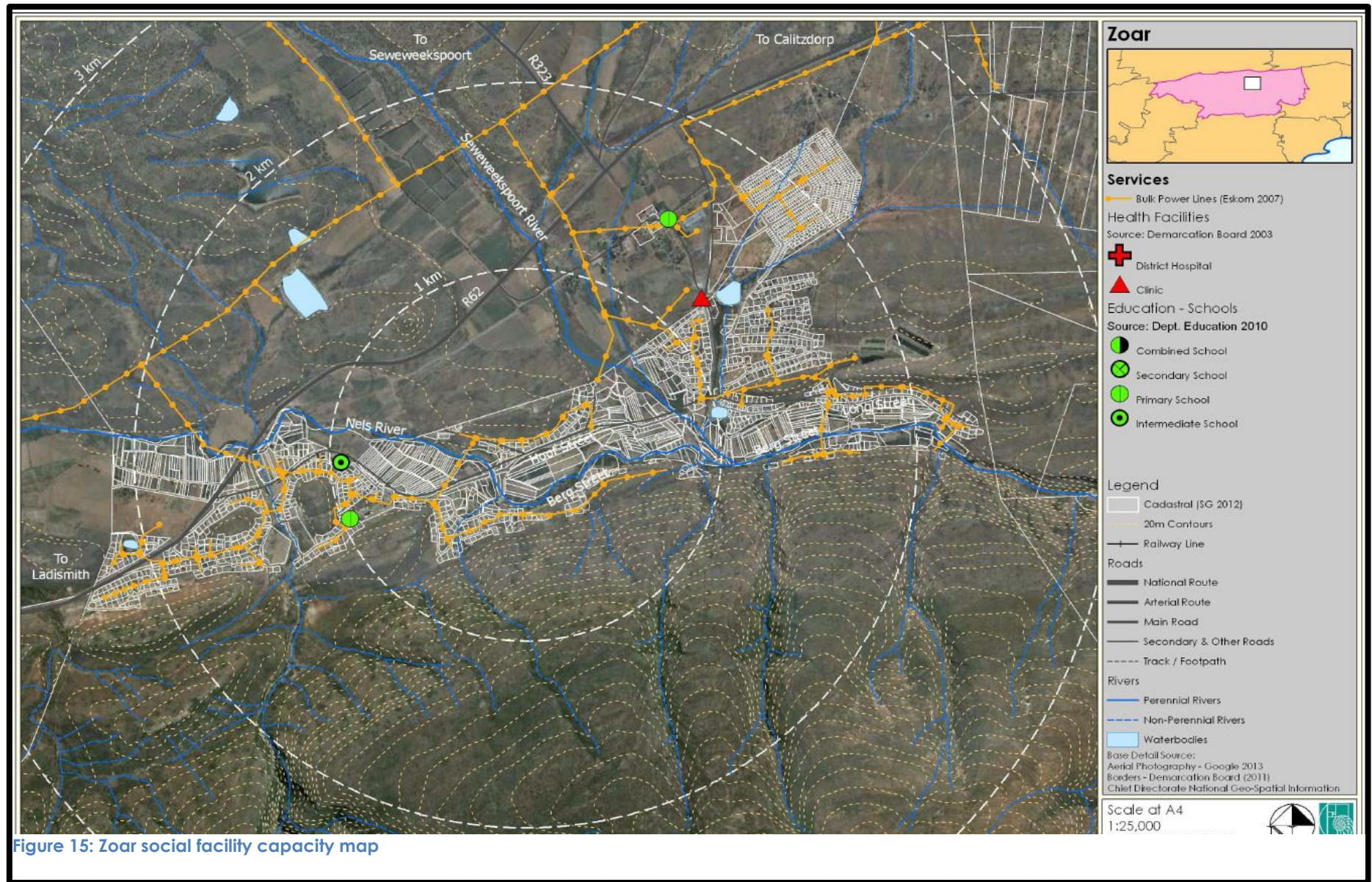


Figure 14: Zoar SDF development proposal

Figure 5.12.2.1 Zoar: Spatial Development Framework



CNdV africa (Pty) Ltd.



4.3 Calitzdorp

Calitzdorp is a town on the Western side of the Klein Karoo and lies on Route 62. Calitzdorp is the second largest town within the Kannaland municipality with a population of 8400. It was established as an agriculture service centre and is also known as the "Port Wine Capital" of South Africa, its economy is driven by Port and wine making, ostrich and fruit farming and tourism. A Port festival takes place in the town in mid-June each year.

Calitzdorp is also renowned for its beautiful gardens featuring splendid Bougainvillea and the wide variety of special architectural styles of the village houses which date from the founding of the village in 1821.

According to the SDF, Calitzdorp falls within Region 3: R62 East. The Nels River runs through the settlement opening up opportunities for intensive agricultural activities. The town is midway between Oudtshoorn and Ladismith on the R62 tourist route.

The town serves as an agricultural service centre to the surrounding agricultural areas. The R62 tourism route forms the main activity street, Voortrekker Street, of the settlement provides significant economic opportunities for the town. In this regard the town offers a number of restaurants, art galleries and guest accommodation types to passing tourists.

The Nels River, and the surrounding agricultural land, divides the settlement into two portions. The eastern portion includes the Old Town and some newer extensions. The older part of Calitzdorp does not appear to be 'planned' in the regular way of many other Dutch settlements with a rectangular grid of short and long streets. Rather the settlement appears to have developed organically as a series of long streets parallel to the river that have developed over time. The newer extensions are much more regular in layout.

The western portion is the result of Apartheid planning and consists of a curvilinear modernist grid layout which optimises motor vehicle travel. This portion generally consists of single small RDP type houses in the middle of their plots. In recent years, social housing projects have reinforced the segregation of this area.

Calitzdorp is known as the port-wine capital of South Africa. The economy of the town is driven by Port and wine making, ostrich and fruit farming and tourism. Large areas of cultivated land are located to the south of the town and along the banks of the Nels River.

Facilities offered here include a combined school, an intermediate school, a high school, boarding facilities and a clinic. Calitzdorp has been identified as having low development potential and high social needs.

4.3.1 Challenges and potential emanating from the SDF:

- ❖ The limited integration between the western and eastern portions of the settlement is problematic.
- ❖ Ensure urban quality of Calitzdorp's 'front window' along Voortrekker Street improves and does not degrade.

4.3.2 Challenges and potential emanating from the status quo analysis:

- ❖ Bulk availability for the 250 erven serviced in 2013/2014 financial year is currently an issue and the remaining 171 services cannot proceed until bulk is sorted out. Investigation on water usage along the pipeline to determine illegal connections is needed.
- ❖ Project to be pushed out by another 3 years (2018/2019) until bulk confirmation is obtained.

4.3.3 Projects identified in the Spatial Development Framework:

- ❖ No further urban development is proposed at Bergsig because of its remote location.
- ❖ Investigate the possibility of developing areas 1 to 9 in the SDF.
- ❖ New market related housing should be developed on parcels 11-15 in the SDF.
- ❖ Create core route system integrating existing settlement and proposed new development areas along Pretorius, Stassen, Van Rensburg, Van Rensburg Extension and Voortrekker Street.
- ❖ A Frontage Urban Design Control Area is proposed along Voortrekker Street so as to ensure that a high standard of building appearances, pedestrian comfort and landscaping is achieved so as to ensure a good impression is made to traffic along this street which acts as the settlement 'front window'.
- ❖ Heritage Conservation area is proposed along Queen Street to Saayman Street, Pretorius Street to Stassen Street and across Voortrekker Street bounded by Queen, Barry and Calitz Street.
- ❖ Link Bergsig and Calitzdorp through a landscaped and treed main route network.
- ❖ Appropriate signage at the entrances of Bergsig would enable motorists travelling along the R62 to make a detour through the settlement.
- ❖ Create a core route system to integrate the existing settlement and new development areas.

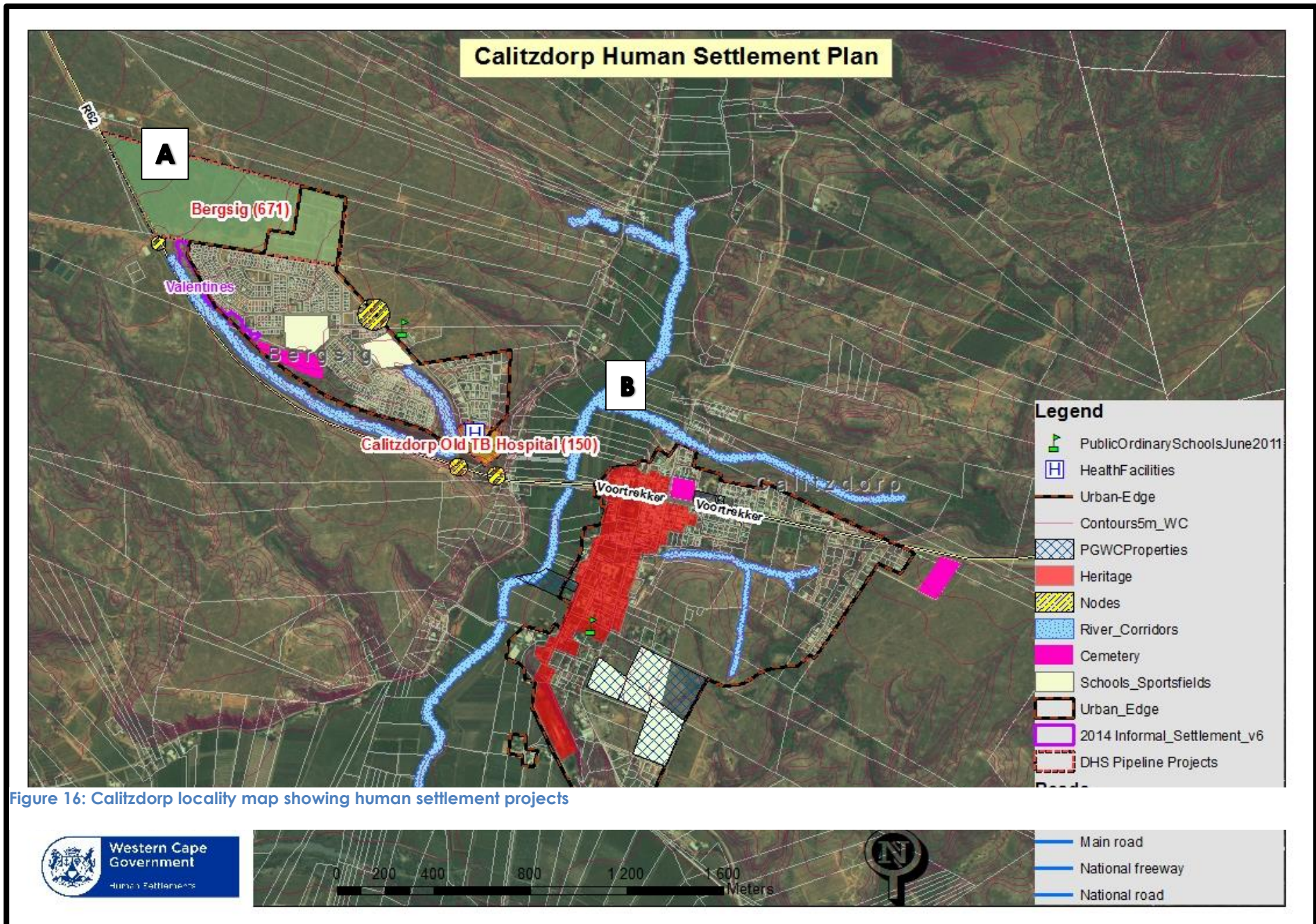
4.3.4 Summary

The table below is a summary of Calitzdorp Land, bulk infrastructure, school and health facilities required to accommodate the future demand.

Land Availability	School Facilities	Bulk Infrastructure	Health Facilities
±52 ha of land are required for future projected housing need based on 40 dwelling units per hectare. However the SDF identify only ±33.45 ha of land for new development of which 0ha is being allocated towards current projects on the pipeline. The SDF identified sites will conveniently accommodate the current subsidy housing demand but a shortfall of ±18.55 ha is required to accommodate overall future projected housing demand.	An additional Intermediate schools is required as the threshold is double the to the norm standard.	Infrastructure needs to be upgraded. @ Water Source ® WTW ☹ Bulk water supply @ Raw water storage ® Reservoir capacity ® WWTW ® Bulk sewer @ Stormwater @ Electricity spare capacity	@ Sufficient
@ = Available ® = Reserved Capacity ☹ Capacity not available			

Table 23: Summary of Calitzdorp Infrastructure Capacity (IGP Report)

Note that the recommendations and comments are subject to the population projection and threshold standards attached as Annexure A.



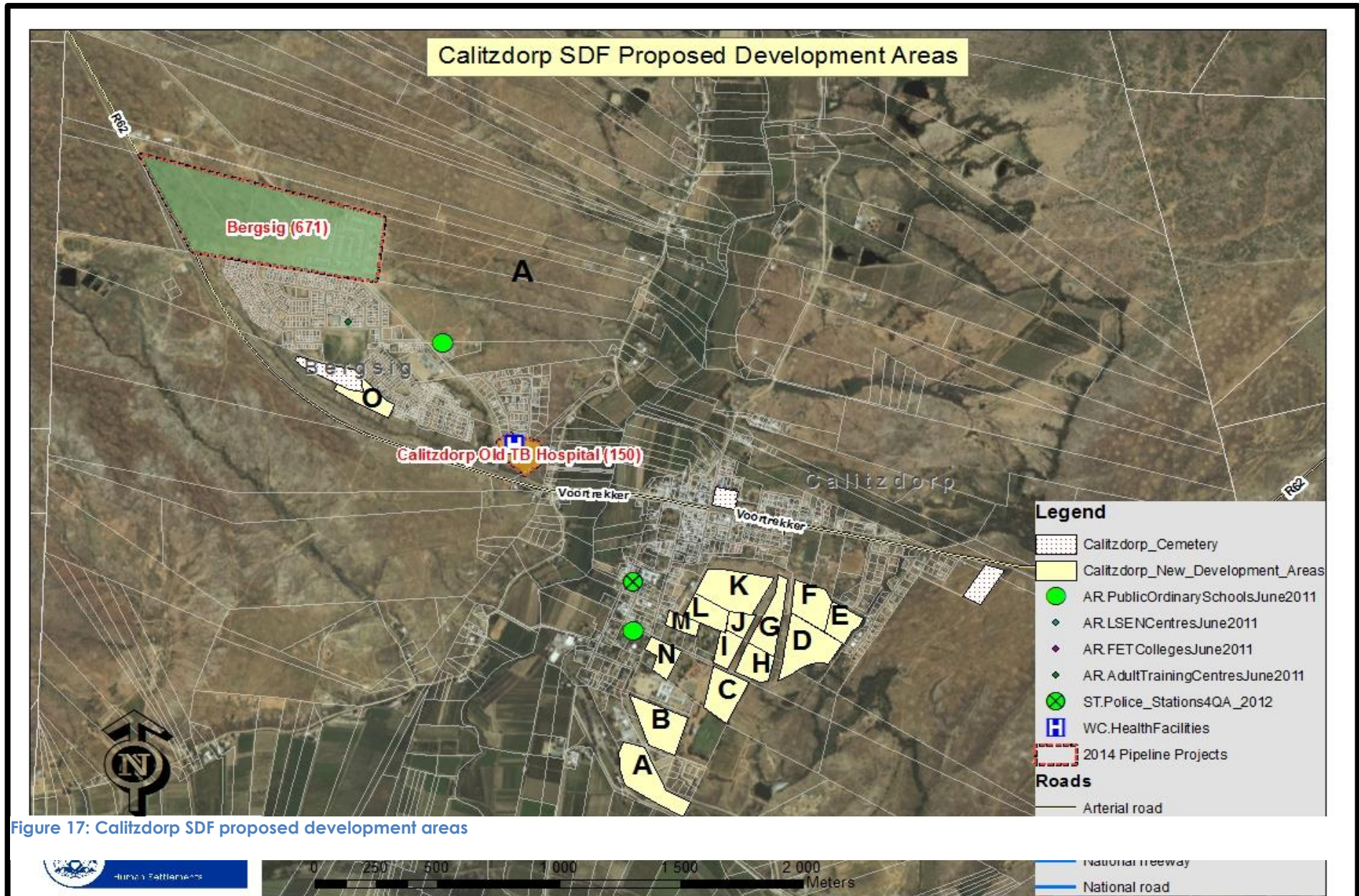


Figure 17: Calitzdorp SDF proposed development areas

Figure 14: Calitzdorp future development areas

SN	Project Name/ Description	No of opportunities	DoHS Approval Status	Statutory Approval Status	Project Implementation Readiness
1	2703/1128 – Calitzdorp Bergsig	692	@Planning @Conditional	@ EIA @ LUPO	Ready Not ready
2	3415 – Calitzdorp Old Hospital	150	⊕ Planning ⊕ Conditional	⊕ EIA ⊕ LUPO	Ready Not ready
@ = Completed/Approved ⊕ = In progress ⊕ = Not yet submitted					

Table 24: Calitzdorp HS pipeline project readiness status

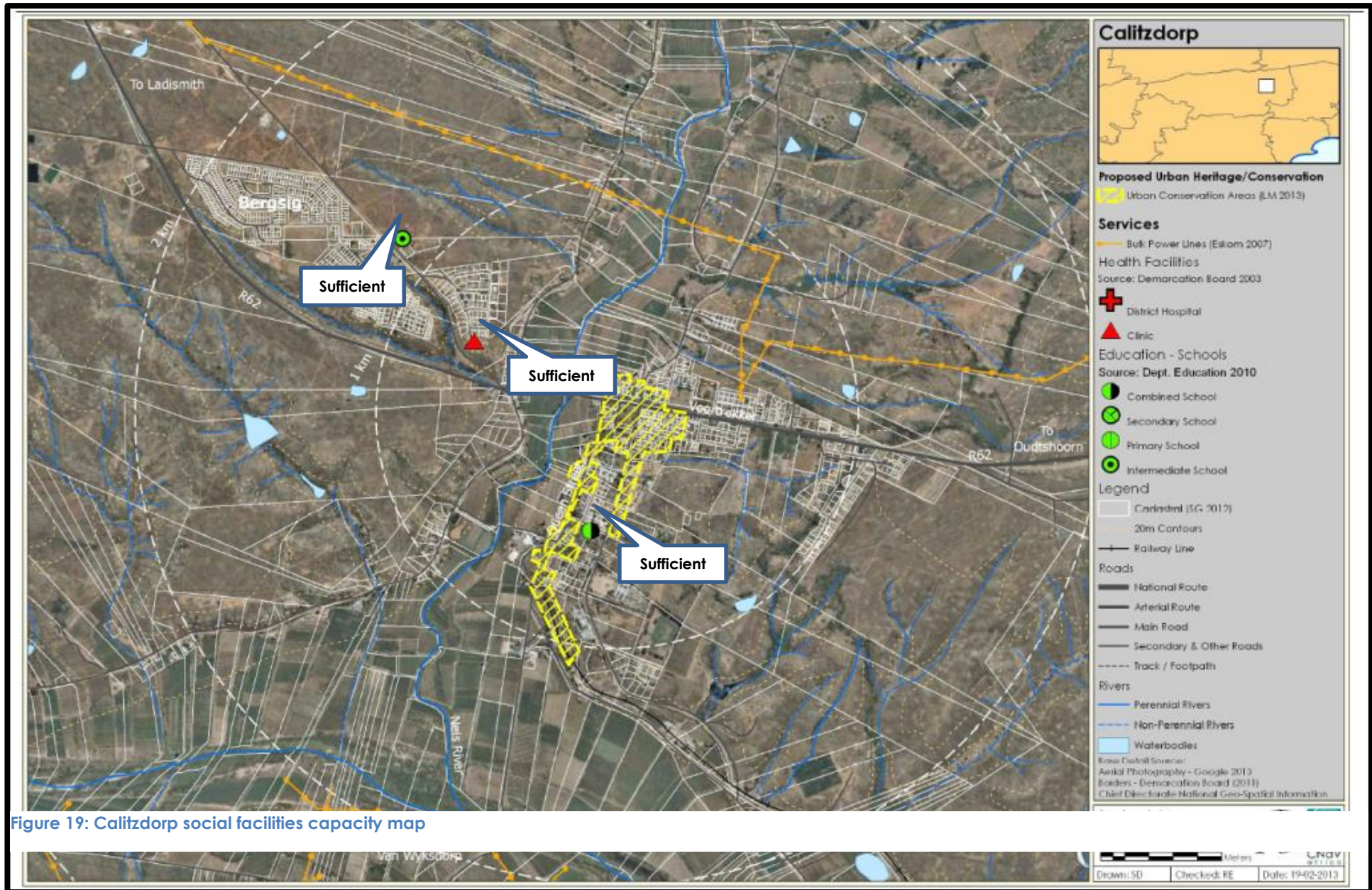
The table above represents projects on the current pipeline with their respective readiness status. **2703/1128 – Calitzdorp Bergsig** is the only project currently ready for implementation.

The projects listed below gives indication of property identified on the SDF for future development and represent a total of **±33.45 ha** which is expected to yield about **± 1338** housing opportunities if developed at average of 40 dwelling units per hectare. However, **none** of the identified sites A,B,C,D,E,F,G, H,I,J,K,L,M,N and O of **figure 17 & table 27** contributes to the projects listed above in the pipeline thus leaving all identified site for future development. A total of **±33.45 ha** is thus available for future settlement proposals within the SDF proposal.

Site	Erf No.	Owner	Size (ha)	Current Property Zoning	Potential No. of erven	Project Prioritization
A	742; 744; 746 & 2891	Private & Trust	3.87	POS	154.8	TBD
B	765 & 740	Private	3.18	POS	127.2	TBD
C	145	Provincial Govt	2.6	POS	104	TBD
D	1854	Private	3.8	POS	152	TBD
E	1853	Private	1.6	POS	64	TBD
F	1974 & 1973	Private	2.39	POS	95.6	TBD
G	1854 & 1811	Private	2.34	POS	93.6	TBD
H	144	Trust	1.69	POS	67.6	TBD
I	144	Trust	1.19	POS	47.6	TBD
J	1854	Private	0.9	POS	36	TBD
K	2021	Private	4.2	POS	168	TBD
L	2021	Private	1.74	POS	69.6	TBD
M	1817	Private	0.88	POS	35.2	TBD
N	722 & 721	Private	1.43	POS	57.2	TBD
O	45	Kannaland Mun.	1.64	POS	65.6	TBD
Total			33.45		1338	

Table 25: Calitzdorp SDF Identified property ownership and zoning status

Note: It has been decided that Site A - N should be investigated for private initiatives due to the fact that the property is privately owned and Site O should be investigated for future human settlement development.



4.4 Van Wyksdorp

In terms of the SDF, Van Wyksdorp falls within Region 4: Van Wyksdorp Lowlands. Van Wyksdorp is remotely located on the northern bank of the Groot River at the foot of the Rooiberg mountains. Van Wyksdorp is the only settlement within Kannaland Municipality which is not located on the R62 and is only accessible by gravel roads.

Van Wyksdorp is a small rural village situated approximately 42km south of Ladismith (along the R327) and 65km from Riversdale. The R327 bypasses the village making it easy for passing motorists not to stop. This increases the remoteness and isolation of the village.

Today the population of the settlement is about 700 people. The town is dependent on the farming of fruit, sheep, cattle and ostriches. The town enjoys a constant water output through a mountain spring.

Economically the town is supported through tourism and agricultural activities. Agricultural areas are even located within the town itself and add to the rural character of the town.

The town offers very limited commercial and retail opportunities and mainly functions as a rural residential village. Facilities in the town include a clinic, a primary school and a police station.

A subsidy housing scheme Green Hills is located to the north of the town. The town is fairly well integrated with the exception of a number of large vacant properties in the town.

4.4.1 Challenges and potential emanating from the SDF:

- ❖ The size and isolation of the village adds to its agricultural / tourism potential.
- ❖ The rural character of the village should be maintained as far as possible.

4.4.2 Challenges and potential emanating from the status quo analysis:

- ❖ Deed search shows property belongs to the municipality and the Erf size is 12.5 hectares.

4.4.3 Projects identified in the Spatial Development Framework:

- ❖ Retain the productive land inside and outside the village to build on the agri-industry and tourism.
- ❖ Limit future urban development to areas of very low potential agricultural land.
- ❖ Direct new BNG housing to the vacant land north of the school.
- ❖ Ensure that the layout and building design of any new developments complementary to the existing pattern and building qualities of the village.
- ❖ Create a continuous route linking the Rooiberg Pass road to the R327 that connects key nodal points such as the primary school, church and village green.

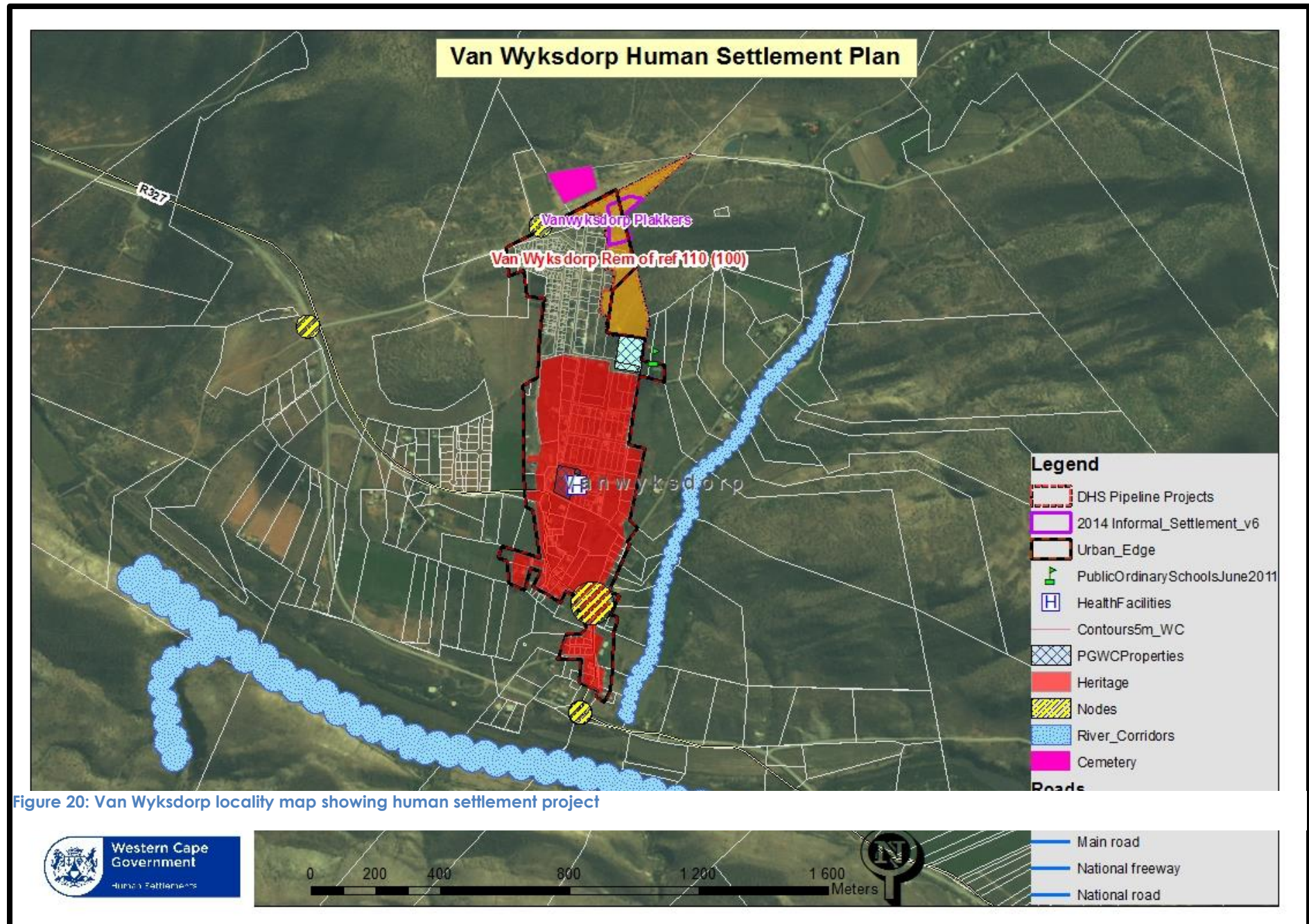
4.4.4 Summary

The table below portrays the condition of Van Wyksdorp social facilities and infrastructure in a nutshell:

Table 26: Summary of Van Wyksdorp Infrastructure Capacity (IGP Report)

Land Availability	School Facilities	Bulk Infrastructure	Health Facilities
±9.7 ha of land are required for future projected housing need based on 40 dwelling units per hectare. However the SDF identify only ±1.98 ha of land for new development of which an undetermined amount of hectares are already being allocated towards current projects on the pipeline. The SDF identified sites will conveniently accommodate the current subsidy housing demand but a shortfall of ±7.72 ha is required to accommodate overall future projected housing demand.	@ Sufficient	Infrastructure needs to be upgraded. ☹ Water Source ☹ WTW ☹ Raw water storage ☹ Pumping capacity ☹ Reservoir capacity ☹ WWTW ☹ Bulk sewer @ Stormwater @ ESKOM supply area	@ Sufficient
@ = Available ® = Reserved Capacity ☹ Capacity not available			

Note that the recommendations and comments are subject to the population projection and threshold standards attached as annexure A.



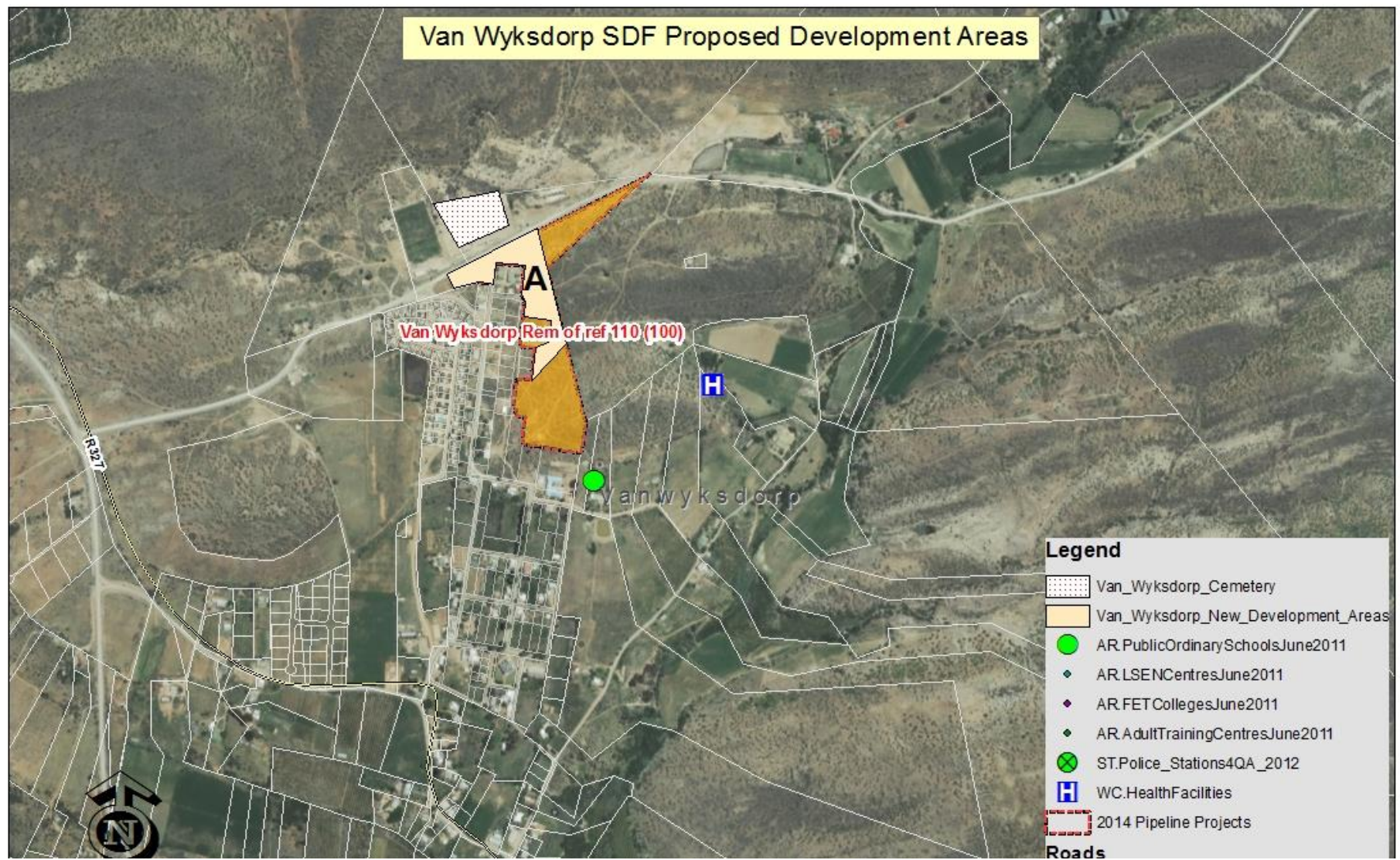


Figure 21: Van Wyksdorp HS project and SDF proposal

SN	Project Name/ Description	No of Opportunities	DoHS Approval Status	Statutory Approval Status	Project Implementation Readiness
1	3324 Van Wyksdorp Re. of erf 110	100	☒ Planning ☒ Conditional	☒ EIA ☒ LUPO	Ready Not ready
@ = Completed/Approved ® = In progress ☹ = Not yet submitted					

Table 27: Van Wyksdorp Human settlement project

The table above represents projects on the current pipeline with their respective readiness status. There is **No** project currently running or ready for implementation in this area.

The project listed below gives indication of property identified in the SDF for future development on Erf 110 Vanwyksdorp of 12.5 ha in extent. From the total extent of the Erf 110, **±1.98 ha** is identified for housing development which is expected to yield about **± 79.2** housing opportunities if developed at average of 40 dwelling units per hectare. The property described as site A, identified through the SDF as indicated in **figure 21 & table 30** contributes to the pipeline project list for Kannaland municipality which only covers a portion of Erf 110 and the remainder is thus available for future settlement proposals within the SDF proposal.

Site	Erf No.	Owner	Size (ha)	Current Property Zoning	Potential No. of erven	Project Prioritization
A	110	Kannaland Mun.	1.98	POS	79.2	TBD
Total			1.98		79.2	

Table 28: Van Wyksdorp SDF proposed future development areas

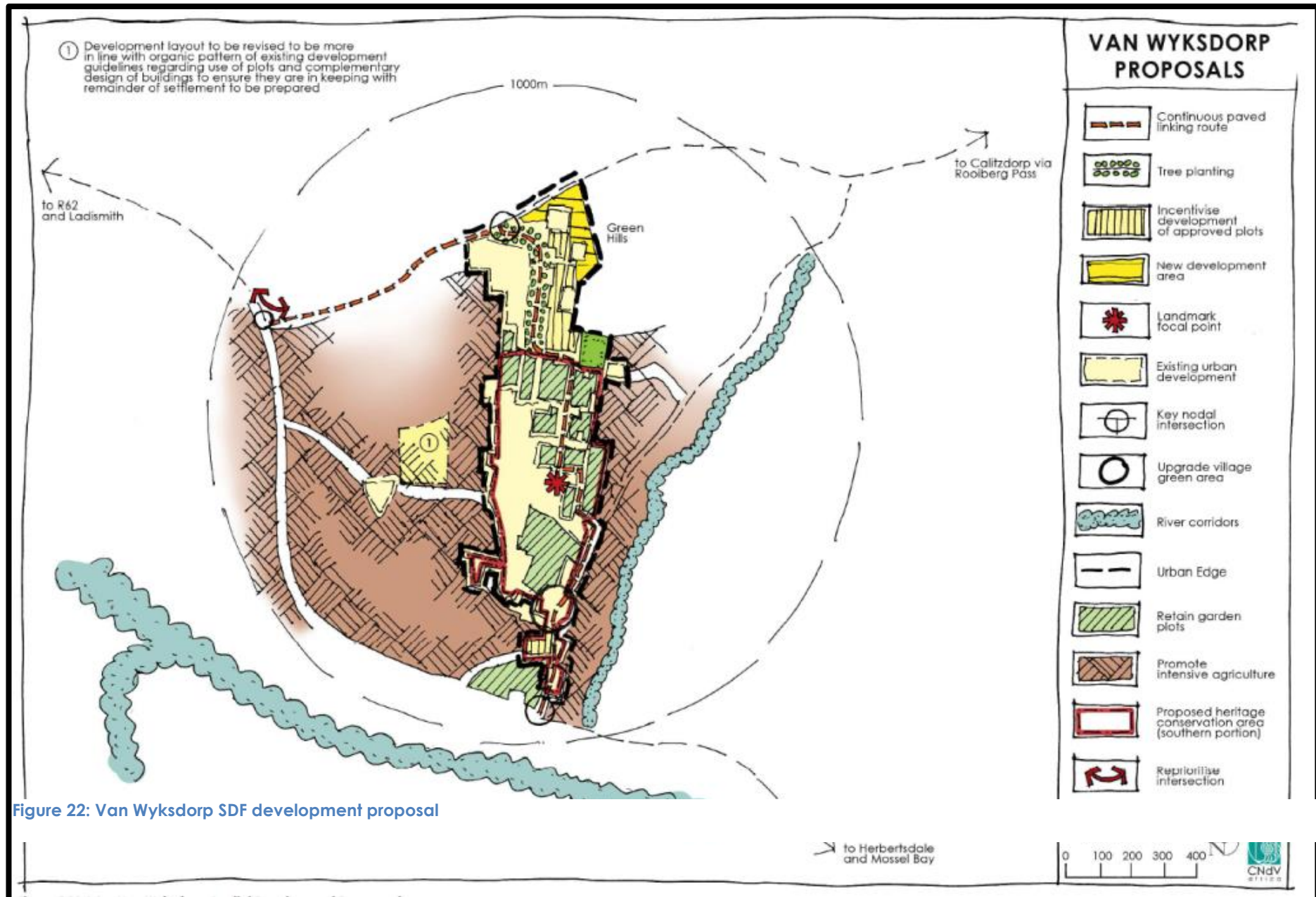
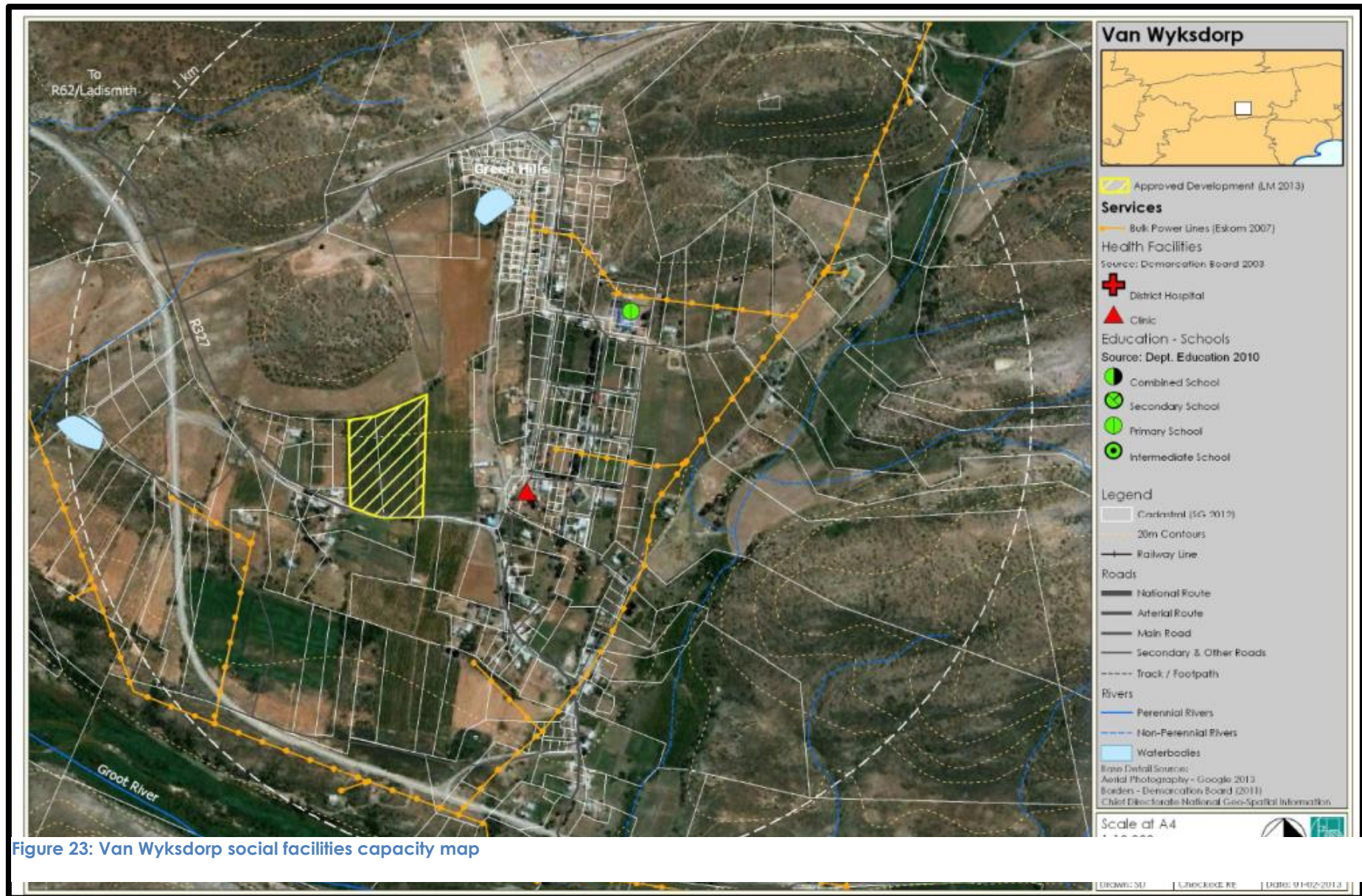


Figure 22: Van Wyksdorp SDF development proposal



5. CONCLUSION

The focus of this report has been on identifying and unpacking potential housing opportunities for the current and future population of the Kannaland municipality. The human settlement plan also demonstrates that human settlement projects cannot be developed in isolation; transversal co-ordination is required to ensure that the broader integrated development is achieved within Kannaland municipal area.

Furthermore, the plan is presenting the development potential of each settlement in respective of their infrastructure, services and facilities in order to prepare a multi-year programme and budget. This multi-year budget includes the current and proposed projects which are likely to meet the provincial sustainability criteria. The plan acknowledged the prioritisation of other sector initiatives in their respective response to service delivery at local level require collective efforts to deal with ever increasing backlog.

The time frame for the implementation of the strategic proposal in this document will be dependent on the capability of the municipality to partner and engage various stakeholders for proposed initiatives. The document will help in communication human settlement plans for the area. Council support is however very paramount to take this plan to the next level of implementation.

Through these means, collaborative effort is however required from all provincial sector departments and private stakeholders to maximise the benefit of daunting document such as this. Without labelling this plan as the only plan having autonomy over sustainable development and as cast-in-stone proposals, yearly review and evaluation is required to accommodate change in status quo which is to be monitored closely.



DISCUSSION DOCUMENT: AMALIENSTEIN AND ZOAR DEVELOPMENT PLAN

March 2017



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WHAT IF.....

Amalienstein Farm and Zoar is safe, clean and attractive. Creating a sense of belonging and a friendly invite for others to experience the culture and values of the area.

We can use the resources that we have to create business opportunities and partnerships that can create prosperity for our community.

Where we care better for each other, nurture our history, arts and culture and support learning and education in our homes and schools.

We can partner with our municipality and others that want to invest and be part of our story.

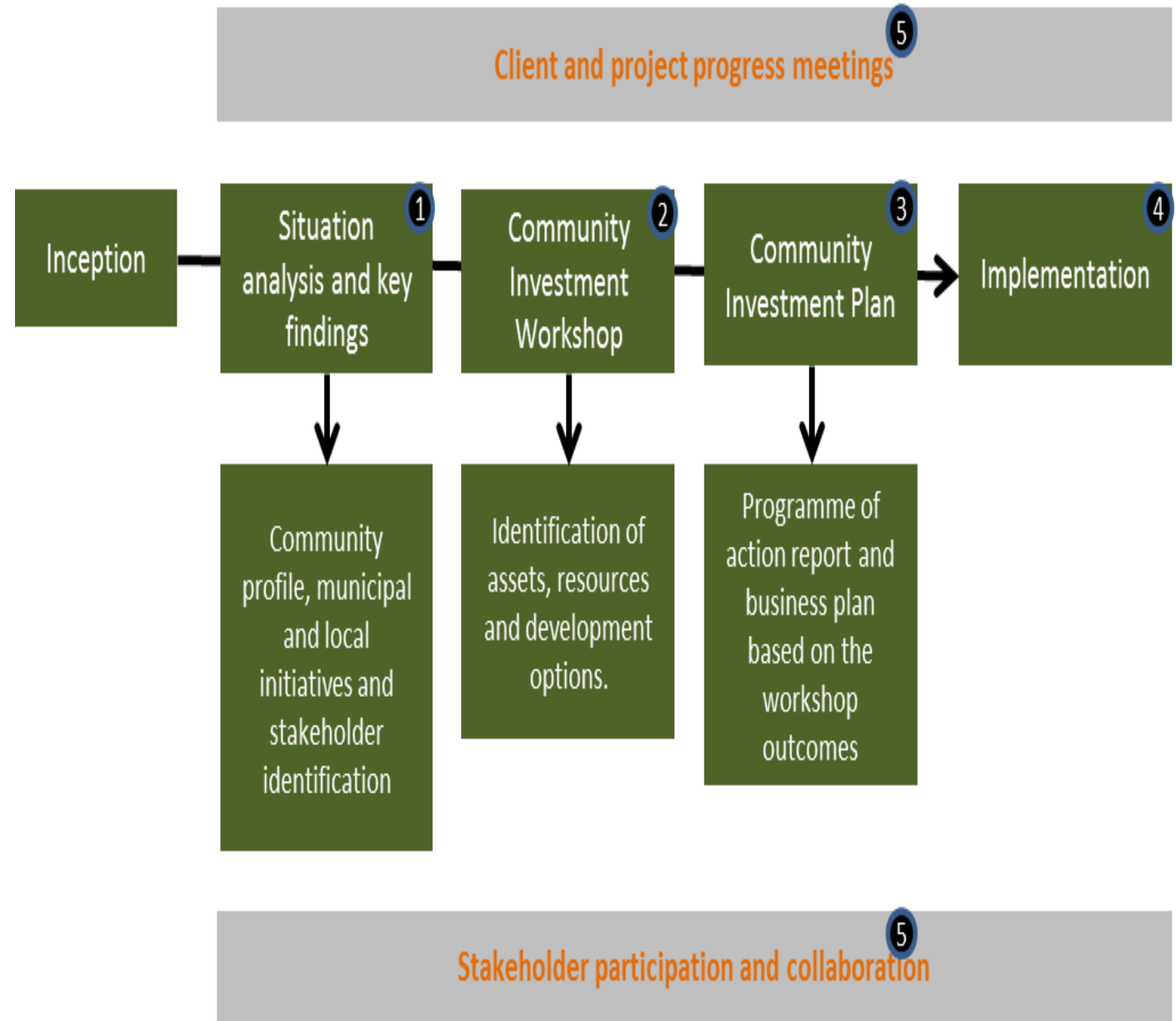
PURPOSE

The purpose of this document is to propose a development process and approach that can built a foundation for sustainable development of the Amalienstein farm and Zoar community area.

PROCESS

The process is focussing on:
Putting in place a vision and process that connect the various stakeholders in the area;
Contributing to the development of the Amalienstein Farm area; and
Connect Amalienstein Farm to the surrounding area and community.

The proposed process and phases as illustrated will address the transformation of Amalienstein farm and surrounding Zoar areas in a much more sustainable way. It will shift the focus away from single and isolated project implementation to a broader investment agenda that will also identify other investors (government, agencies and donors) and community and enterprise development interventions that will sustain the ongoing development and consolidation of the area.



WORKSESSION

General Profile

During February 2017, a community workshop was held with a number of stakeholders from Zoar (see attendance list). The purpose of the session was to discuss the profile of the area in terms of:

- Challenges and issues
- Resources and assets
- Mapping of challenges and resources
- Vision statements
- Projects

The diagram on the page is a heat map of the perceptual “score” that participants gave to the issues or indicators that were discussed. It ranges from the lowest scoring “quality of recreation activities” to the highest scoring “hope for the future”.

Indicator/Issue	Score
Quality of recreational activities	1.0
Access to financing for business activities	1
Ability to save money	1
Access to business mentorship	1
Quality of Youth programmes	1.2
Income levels	1.2
Access to technology	1.2
Access to business opportunities	1.2
Quality of play/recreational space	1.2
Levels of crime	1.4
Incidents of drug /Alcohol use	1.4
Jobs availability	1.4
Access to training	1.4
Is the streets safe at night ?	1.6
Food security	1.8
Skills levels	1.8
Support from local businesses	1.8
Housing quality	1.8
Water quality	1.83
Availability of shops	2
Attendance of community activities/events	2
Quality of Health care and Clinic operations	2
Violence prevention	2.1
Collaboration with the municipality	2.2
Level of active volunteering	2.2
Is the town attractive and clean ?	2.4
Quality of sewer and toilets	2.4
Are the community supporting crime prevention interventions?	2.4
Visible policing	2.6
Do people have title deeds/ownership ?	3
Quality of family relationships	3
Are the community supporting schools in their area?	3
Level of School attendance	3.2
What is the quality of Inter-cultural relationships?	3.4
What is the quality of public transportation	3.8
Is quality electricity available ?	4
Can you depend on your neighbour for help?	4
Level of religious activities/events	4.6
Do you have Hope for the future	4.6

Priorities

In terms of priorities, the diagram on the page indicates the issues that were mentioned the most times as priorities. The highest mentioned issues were:

- Quality of recreation or play areas
- The quality of housing
- Community supporting crime prevention interventions

The second tier issues that were mentioned the most include:

- Incidents of drug /Alcohol use
- Quality of Youth programmes
- Skills levels
- Access to business opportunities
- Access to training
- Streets safety at night?
- Collaboration with the municipality
- Attendance of community activities/events

Quality of Health care and Clinic operations	1
Violence prevention	1
Level of School attendance	1
Access to financing for business activities	1
Ability to save money	1
Availability of shops	1
Is the town attractive and clean?	1
Quality of family relationships	1
Do you have Hope for the future	1
Levels of crime	2
Quality of recreational activities	2
Food security	2
Access to technology	2
Jobs availability	2
Level of active volunteering	2
Incidents of drug /Alcohol use	3
Quality of Youth programmes	3
Skills levels	3
Access to business opportunities	3
Access to training	3
Is the streets safe at night ?	3
Collaboration with the municipality	3
Attendance of community activities/events	3
Quality of play/recreational space	4
Housing quality	4
Are the community supporting crime prevention interventions?	4

Vision

During the work session, participants were asked to list words that will describe a future Zoar. The following was mentioned:

Vision words	Vision statement
Dream big	Zoar is a place where.....
Empower	
Restore	
Perseverance	
Sustainable	
Safe	
Tourism	
Skills development	
Trust	
Integrity	

Intervention Proposal

The following is a list of proposals mentioned by representatives, as well as the associated resources.

Issue	proposal	Resources
Education	Rehabilitation centre	
	School	3 church schools
	Improve school attendance	Department of Education, Governing bodies
	FAS centre	
Employment	Development of agriculture land	land
	Agri processing	
	Guest house, restaurant	
	Hiking, climbing and cycling trails	

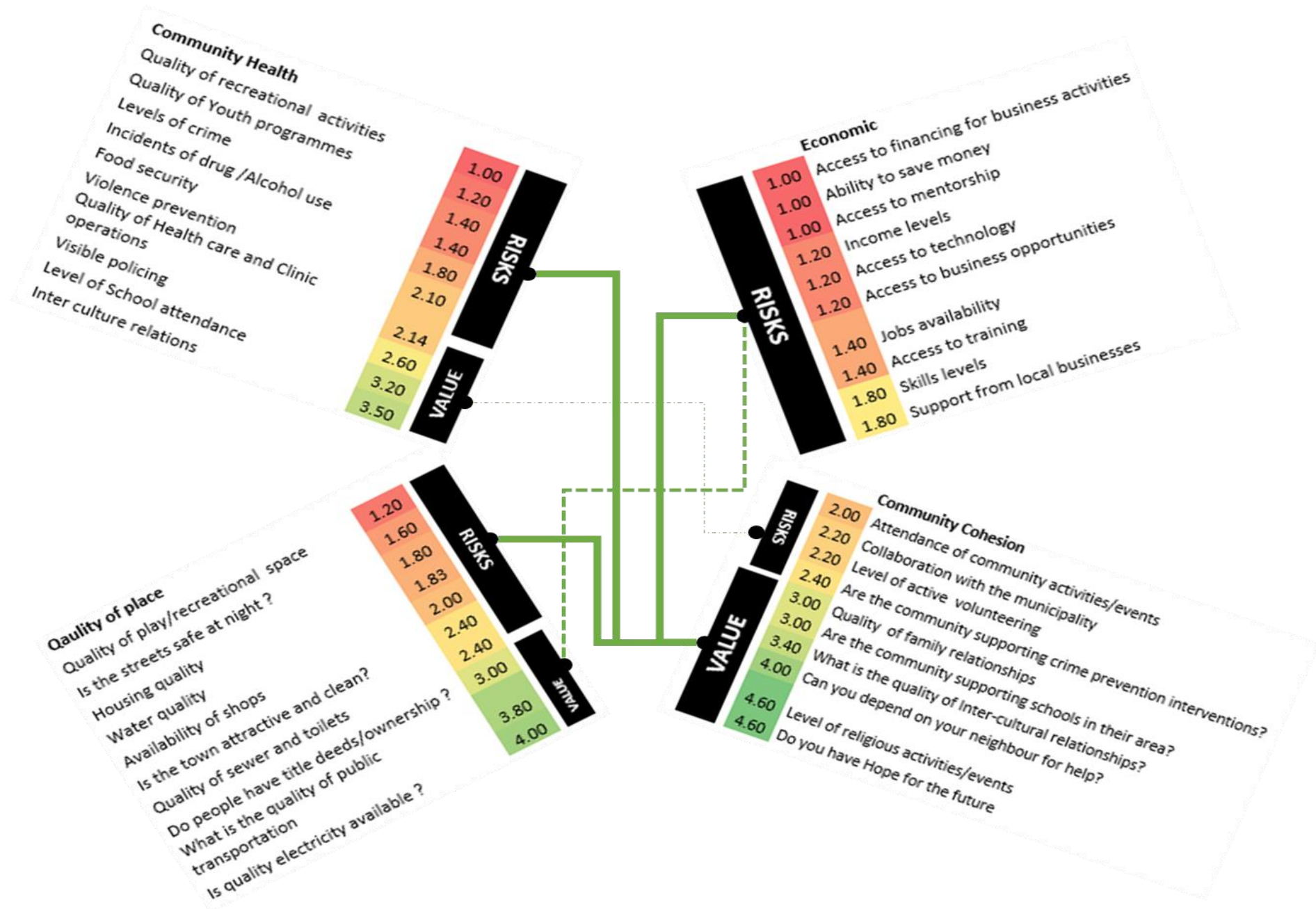
Recreation	Upgrade of sport fields	Existing
	Youth Centrum	
	Internet centre	
Violence protection	Improve policing and community involvement	Police and community members
	Neighbourhood watch	
Street safety	Upgrade street lights	
Consumer services	New shops, filling station	
Infrastructure	Build new dam	
	Upgrade roads	
	Upgrade walk ways	

Ranyaka VALUE RESPONSES

The indicator heat map can further be divided into 4 development quadrants. By doing this, each of the quadrants show risks and values in terms of the perception score provided at the work session.

The intention is to use high quadrant values to influence risks positively.

The Community Cohesion quadrant, for example, has the highest values. which should be used to influence the other quadrants.



The next step is to indicate the inter relationships between risks and values. The matrix will assist in the identification of specific interventions

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INTERVENTIONS

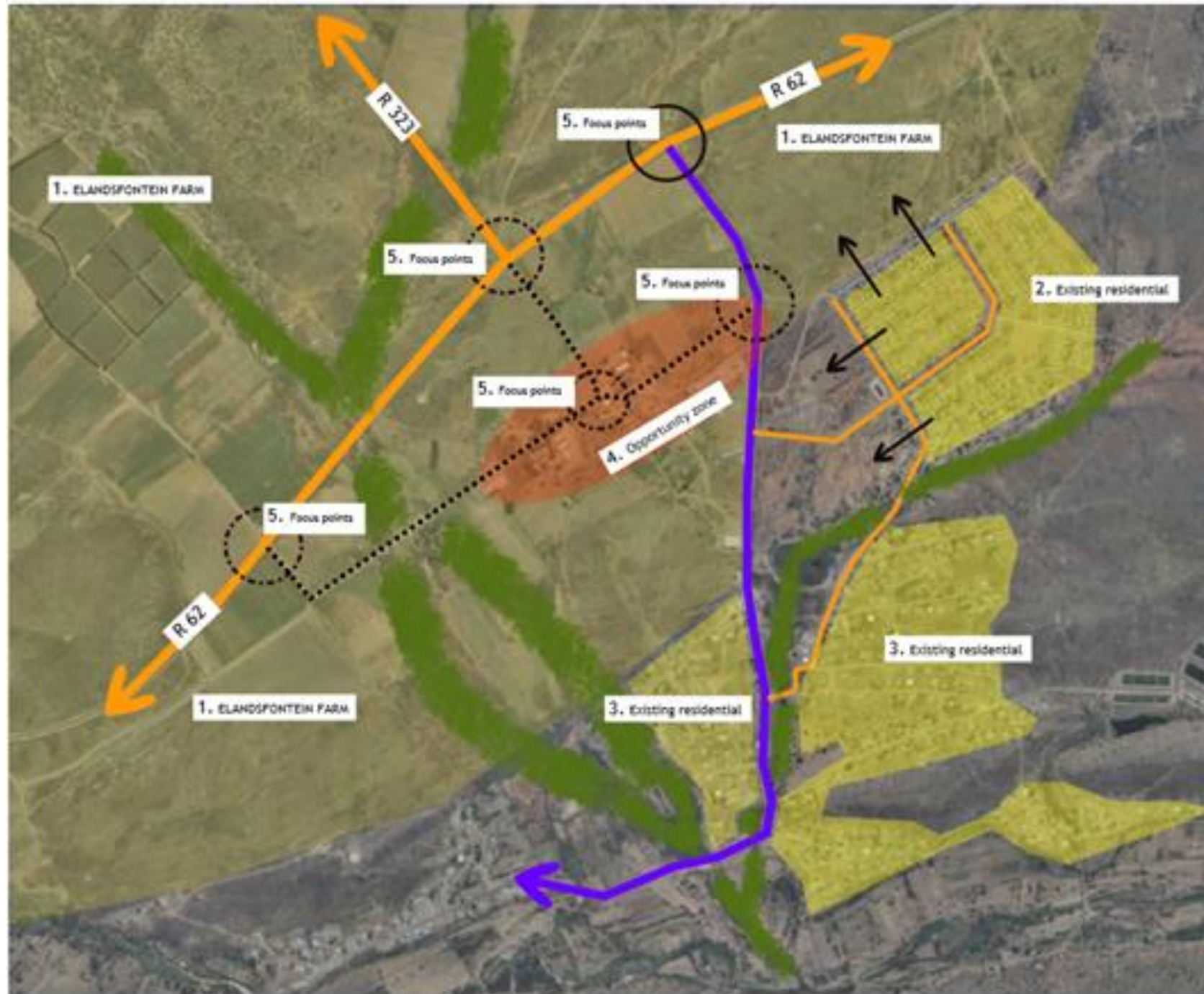
Indicator/Issue	Score	Interventions	Targets	Cost	Stakeholders
Quality of recreational activities	1.0				Municipal and private sector
Access to financing for business activities	1				
Ability to save money	1				Service providers, financial institutions
Access to business mentorship	1				Local businesses and stakeholders
Quality of Youth programmes	1.2				Municipality, service providers, local stakeholders
Income levels	1.2				Map relationship with other initiatives
Access to technology	1.2				Municipality /Government
Access to business opportunities	1.2				Map relationship with other initiatives
Quality of play/recreational space	1.2				Municipal and private sector
Levels of crime	1.4				SAPS, CPF and local security firms
Incidents of drug /Alcohol use	1.4				Service providers and local stakeholders
Jobs availability	1.4				
Access to training	1.4				Service providers and local stakeholders
Is the streets safe at night ?	1.6				Municipality, SAPS, CPF and local security firms
Food security	1.8				Municipality /Government, local stakeholders
Skills levels	1.8				Service providers and local stakeholders
Support from local businesses	1.8				
Housing quality	1.8				
Water quality	1.83				
Availability of shops	2				
Attendance of community activities/events	2				
Quality of Health care and Clinic operations	2				
Violence prevention	2.1				

Indicator/Issue	Score	Interventions	Targets	Cost	Stakeholders
Collaboration with the municipality	2.2				
Level of active volunteering	2.2				
Is the town attractive and clean?	2.4				
Quality of sewer and toilets	2.4				
Are the community supporting crime prevention interventions?	2.4				
Visible policing	2.6				
Do people have title deeds/ownership ?	3				
Quality of family relationships	3				
Are the community supporting schools in their area?	3				
Level of School attendance	3.2				
What is the quality of Inter-cultural relationships?	3.4				
What is the quality of public transportation	3.8				
Is quality electricity available ?	4				
Can you depend on your neighbour for help?	4				
Level of religious activities/events	4.6				
Do you have Hope for the future	4.6				

Example Conceptual drawing Overall Concept

The overall concept comprises of:

- Investigate opportunities for the broader Amalienstein Farm (Elandsfontein Farm) area;
- Consolidate existing residential areas and identify a growth policy;
- Look at the development options of the existing but less formal developments as per the conceptual drawing;
- Identify development options where other stakeholders can contribute to the development of the existing Amalienstein Farm opportunity zone; and
- Upgrade of entry points so that they can act as gateways to the area and contribute to the tourism potential of the area.



Development Examples



CoCreate centre: Place to develop community capacity and address community issues including foetal alcohol syndrome, life skills development etc.



Re-imagine key spaces for example the spaces surrounding the church



Utilise resources in an appropriate and sustainable manner



Create a tourism friendly environment



Create a tourism friendly environment

IMPLEMENTATION

Institutional

The link with the IDP process is important to ensure that the Zoar proposals and projects are firstly resourced and secondly go through a proper project feasibility and planning process.

It is recommended that the implementation and monitoring of the Zoar proposal, be closely linked to the IDP process and the statutory reporting as required in terms of the Municipal Finance Management Act (MFMA). This is critical in order to (1) ensure integration and (2) avoid the cumbersome duplication of processes. It is also recommended that with each revision cycle, the Zoar proposals be improved as more detailed planning and sector planning is done and more information becomes available through various studies and planning processes.

Three main streams of monitoring and revision are proposed:

1 – Short term (maximum 5 years) focus: project implementation through the IDP process, monitoring and reporting of implementation.

2- Long term focus: developing of impact indicators and relevant data collection over time, five-yearly revision of the SDF based on impact assessment.

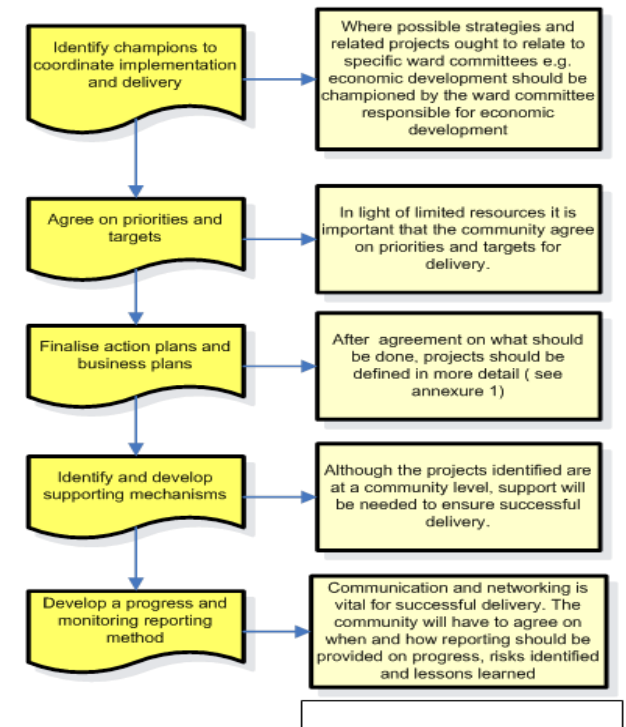
3- Detailed planning and sector planning where required: The development of more detailed sector plans e.g. tourism, will result in more information and also more specific implementation guidelines. This could enrich and enhance the Zoar proposals, and can be taken into account during both the IDP annual revisions and major 5-year revision cycle.

Structures

The successful delivery on the proposals and interventions as discussed by the joint management forum will depend to a large degree on the creation of partnerships and harvesting of all possible resources, including resources available in the community.

The outcomes should include:

- Ensuring the involvement and capacitating of communities and stakeholders.
- Focusing service delivery on the end users.
- Building trust and commitment.
- Managing performance and providing regular feedback to the community.
- Creating public awareness and disseminating information on the process and implementation plans.
- Developing an engagement strategy.



5-year revision cycle.

Structures

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- Managing performance and providing regular feedback to the community.
- Creating public awareness and disseminating information on the process and implementation plans.
- Developing an engagement strategy.

The Community-Based Partnerships principle encourages all stakeholders in a community , as part of the ward committee process, to participate in the revitalization of distressed neighborhoods. Partnerships include residents, businesses, local political leaders, local government, community development corporations, local public health and social service departments, unions, environmental groups, schools and universities, faith-based organizations, and other community groups.

The proposed delivery process is founded on two processes i.e.:

A five step approach as part of the joint forum approach is proposed to take the strategies and projects forward towards delivery. These steps include:

Step 1: Identify champions to coordinate the implementation and delivery of strategies and projects

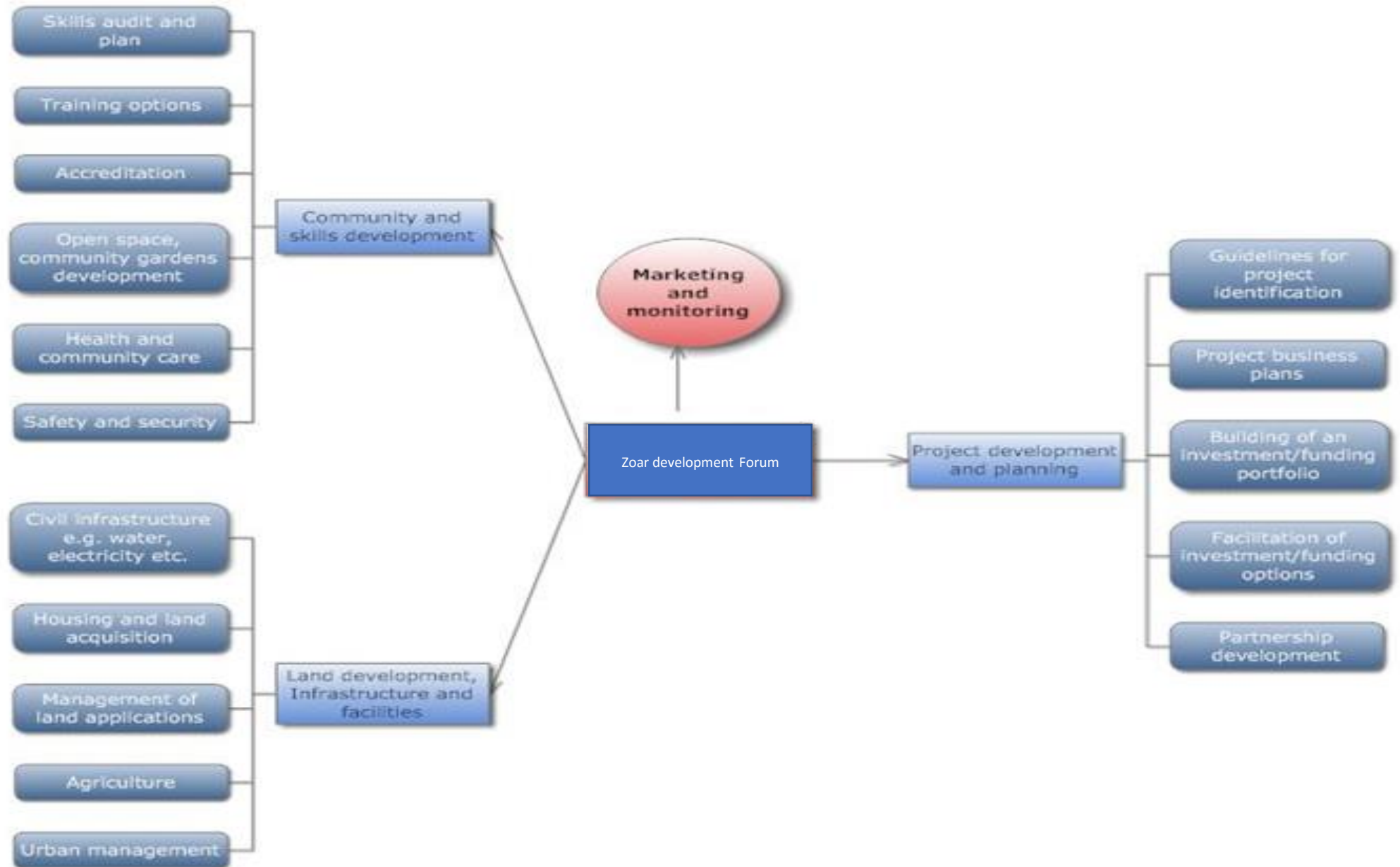
Step 2: Agree on priorities and targets

Step 3: Finalise action plans and business plans

Step 4: Develop support mechanisms

Step 5: Implement a progress and monitoring reporting system

Funding



Zoar • Amaliënstein Landelike Ontwikkelingsplan

<u>LANDBOU</u>	<u>INFRASTRUKTUUR ONTWIKKELING</u>	<u>TOERISME</u>	<u>ONDERWYS</u>	<u>GPF</u>	<u>GESONDHEID & WELSYN</u>
Oordrag van die plaas Amaliënstein na Zoar gemeenskap. Bestuursplan en staatshulp in die vorm van finansies en ander hulpbronne vir 5 jr. vir kontinuïteit. Opgradering van damme Bou van Waterval / Seweweekspoortdam Moontlike verhoging van Tierkloof damwal Hervestiging van tradisionele gewasse	Toegangsborde Opgradering van Maxis Winkelsentrum Motorhaweb met Infosentrum en Kuriowinkels Biblioteek met Internet fasiliteite Restourasie geboue, historiese geboue Park vir kinders en piekniek fasiliteite in die meent	Opgradering van Restaurant en Gastehuis Lodge in die Meent Infosentrum en Kuriowinkels by die Motorhawe Hiking trails Fietsry en bergklim Geskiedkundige en tradisionele toerisme Agri-toerisme Ontwikkelings-toerisme	Nasorgsentrum Amalgamering van skole tot 'n skool wat alle grade bedien	24/7 bemande satelliet	FAS SENTRUM Skool met opleidingsfasiliteite Vaardighedsontwikkeling Akkomodasie-fasiliteite/Hostel Tehuis vir versorging van bejaardes Beradingskantoor Remedieërende onderwys

Zoar/Amaliënstein Landelike Ontwikkelingsplan

LANDBOU

Kraalfasiliteite vir diere buite woongebied

Wild vestiging in die meent

Oornagdamme opgradeer asook grondslote na tuinpersele met pyleiding vervang

Oordrag van Meentgrond aan die gemeenskap (CPA)

Opleidingsprogram deur Dept. van Landbou en Landelike ontwikkeling en Grondhervorming om blokverbouing by kleinboere aan te moedig

Instel van mentorprogram om plaas winsgewend te bedryf

Dip en ander fasiliteite daarstel om dieregesondheid te bevorder

Hoëvlak ondersoek deur Dept. Waterwese (DWS) na damme en keerwalle in die loop van Nelsrivier. Ondersoek instel na waterregte uit Nels-Seweweekspoort riviere vlg. waterwet

INFRASTRUKTUUR ONTWIKKELING

Opgradering van sportgronde asook krieketveld

Solargeysers vir huise

FAS SENTRUM

DEPARTMENT OF SPECIAL EDUCATION CENTRE

1. Counselling Office

- a. Evaluation of children with learning disabilities.
- b. Counselling of children with behaviour problems.
- c. Occupational therapy

1. Early Child Development Program.

- a. Baby centre for moms and baby daily program.
- b. Crèche for toddlers in different development phases.(in conjunction with routine clinic follow-ups of children – see emergency services)
- c. Pre-school - grade R classes.

1. Remedial Teaching

- a. Children with learning disabilities.
- b. Children with: ADHD, F.A.S, Autism, Asperger's Syndrome
- c. Children with Neurological Disabilities.
- d. Practical education in Agricultural subjects, Hospitality & Home Economics and Nursing as career guidance for all school grades.

1. ABED Training

Training for all the employees at Amalienstein and community.

1. Aftercare Centre

- a. Study rooms for all students at Amalienstein.
- b. Library facilities with Internet accessibility.
- c. Extra classes on different subjects to all members of the community.

Sport and Recreation:

Through establishing a Gym (with the cooperation of Virgin Active) to develop physical and mental fitness through the different sports, where discipline and self-discipline will form the basis of the training for instance:

- a. Wrestling
- b. Cross country running
- c. Rugby
- e. Karate Training
- f. Basketball
- g. Soccer

Dr. Lindy Bosman & Rachel Nieuwenhuys

Community Upliftment

1. Fase 1. Initial Phase: (Funding Combination: Municipality & Department Social Development)

Identification

- 1.1.Current Problem
- 1.2.Family history
- 1.3.Sosio – Economic situation (Work & home environment)
- 1.4.Education and Psychological development
- 1.5.Illness
- 1.6.Categorical Evaluation Report
- 1.7.Referral

2. Phase 2: Referral Phase (Funding Department of Social Development)

- 2.1.Parents
- 2.2.Children, all siblings living
- 2.3.Grandparents
- 2.4.School assistance
- 2.5.Church involvement

3. Phase 3: Counselling (Funding: Department of Health)

- 3.1.Clinical Psychologist
- 3.2.Occupational Therapy
- 3.3.Medical treatment – Community Sister AIDS/TB
- 3.4.Social Workers & Auxiliary Workers

4. Phase 4: Facilities Needed

- 4.1. Childrens Home / Hostel for Safety Parenting
- 4.2.Rehabilitation – drugs & alcohol abuse
- 4.3.Youth behaviour
- 4.4.Old Age Homes
NB: No facility should accommodate more than 20 -25 people and 4 staff members.
- 4.5.Crises centre for woman and children overnight safety care.
- 4.6.Satellite Police Station (Government)

4.7.Emmergency Services (Department of Health and Safety)

- 4.7.1. Ambulance Station (Department of Health and Safety)
- 4.7.2. Fire Unit (Department of Health and Safety)
- 4.7.3. Home Care base Control Office (Department of Health and Safety)

4.8.Adequate Schools: Department of Education

4.9.Training Hub: Evening classes (Department of Education)

- 4.9.1. Student Study Centre with WiFi
- 4.9.2. ABED Program
- 4.9.3. Gym facility
- 4.9.4. Ballroom dancing / Chess / Wrestling / Carate
- 4.9.5. Music
- 4.9.6. Drama Centre
- 4.9.7. Chef courses
- 4.9.8. Tourism & Hospitality courses

4.10. Tourism Centre (Finances Municipality)



064-475-NPO

ENGEDI HAVEN FOR RURAL YOUTH

LADISMITH

VAN RIEBEECK STRAAT 29/ POSBUS 303

TEL: 028 551 2574 FAKS: 028 551 2574





**Western Cape
Government**



Kannaland Municipality

2016

At a Glance: Kannaland

Demographics

Community Survey, 2016



Population

24 168



Households

6 333

Education



Matric Pass Rate 2015 92.4%

Literacy Rate 2011 72.5%

Poverty



Poverty headcount (2016) 1.2%

Percentage households with no income (2016) 8.7%

Health

2015



Primary Health Care Facilities

10

Immunisation Rate

81.6%

Maternal Mortality Ratio (per 100 000 live births)

0

Teenage Pregnancies - Delivery rate to women U/18

7.7%

Safety and Security

Percentage change between 2015 and 2016 in number of reported cases



Residential Burglaries

0.3%

DUI

-17.4%

Drug-related

10.8%

Murder

8.2%

Sexual Crimes

-24.6%

Access to Basic Service Delivery

Percentage change between 2015 and 2016 in number of households



Water

-0.4%

Refuse Removal

22.1%



Electricity

5.7%



Sanitation

17.0%



Economy

GDP Growth 2005 – 2015

3.6%



Labour

Employment Growth 2005 – 2015

1.4%



Broadband



Number of wards currently with WCG Wi-Fi hotspots

0

Largest 3 Sectors

Contribution to GDP, 2015

Commercial Services

45.6%

Agriculture, Forestry and Fishing

18.2%

Government and Community, Social and Personal Services

16.4%

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1

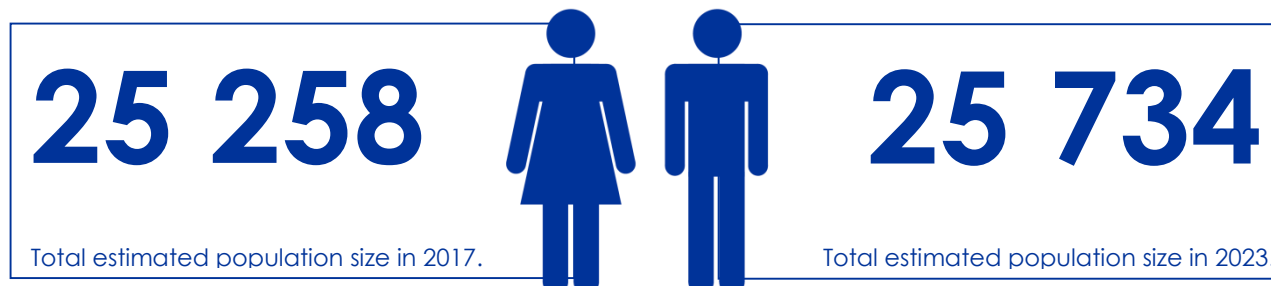
DEMOGRAPHICS

Demographics is broadly defined as the study of population dynamics which is significantly influenced by a wide array of factors such as birth and death rates, migration patterns, age, race, gender, life expectancy etc. The importance of understanding demographics as a decisive factor in shaping our current socio-economic reality is therefore critical for governments, economists and politicians alike.

The following section provides a concise, yet meaningful overview of the most prominent demographic indicators relevant for municipal planning and budgeting. It is contended that the population and household statistics provided hereto will assist municipalities to set accurate and credible service delivery targets across the new 5-year integrated development cycle.



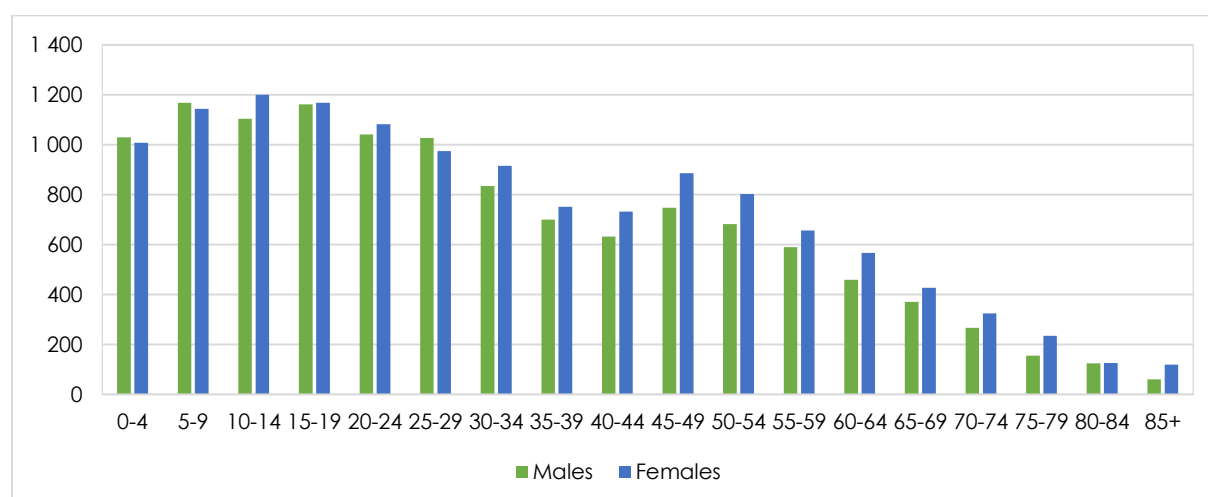
POPULATION BREAKDOWN



Kannaland has the smallest population in the Eden District, which, according to the forecasts of the Western Cape Department of Social Development, is estimated to be **25 258** in 2017¹. This total gradually increases across the 5-year planning cycle and is expected to reach **25 734** by 2023. This equates to an approximate **1.9 per cent growth** off the 2017 base estimate.

In 2017, Kannaland's population gender breakdown will be relatively evenly split between male (12 148, 48.1 per cent) and female (13 111, 51.9 per cent). For 2023, the split is anticipated to be 12 305 (47.8 per cent) and 13 428 (52.2 per cent) for males and females respectively.

AGE DISTRIBUTION



In 2017, Kannaland's population will largely be concentrated between the ages of 5 – 19, after which it gradually decreases towards the age groups 35 – 44. The decreasing population concentration can be ascribed to the phenomenon whereby younger generations leave the region in search of better employment opportunities in larger cities. The population concentration does however spike upwards between the ages of 45 and 49 which, amongst other reasons, can be attributed to an increasing trend amongst more affluent citizens to retire or down-scale to rural areas at a relatively young age.

¹ The data provided hereto serves as a 2017 – 2023 forecast to coincide with the new 5-year IDP planning cycle. Municipalities are however urged to consult the results of the 2016 Community Survey for the 2016 population count.

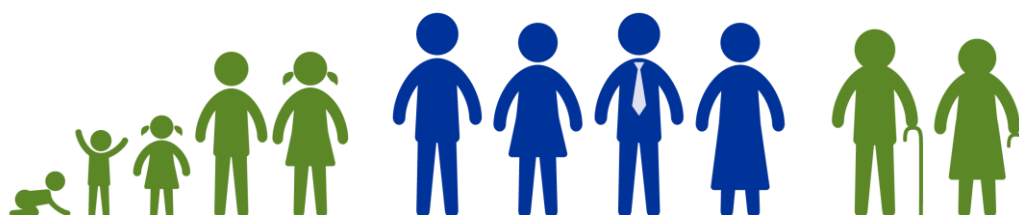
HOUSEHOLDS



In order to ensure basic service delivery to all, municipal budget allocations should be informed by credible and accurate assumptions regarding the number of households within a municipal area.

According to Census 2011, there were **6 212** households within the greater Kannaland region. As per the 2016 Community Survey estimates, the number of household increased by 1.95 per cent to **6 333** in 2016.

AGE COHORTS



Year	Children: 0 – 14 Years	Working Age: 15 – 65 Years	Aged: 65 +	Dependency Ratio
2011	7 118	15 727	1 922	57.5
2017	6 652	16 402	2 204	54.0
2023	6 253	16 922	2 558	52.1

Kannaland displays decreasing dependency ratios of 57.5, 54.0 and 52.1 across 2011, 2017 and 2023 respectively. As lower dependency ratios imply less strain on the working age to support their economic dependents (children and aged), this decrease will have positive social, economic and labour market implications.

A decrease in the dependency ratio is often associated with a relative increase in the working age population. From a national perspective, the relative increase in the working age population, if accompanied by employment opportunities, will result in higher tax revenues, possible pension surpluses and an overall decline in inequality as citizens can more easily tend to the needs of their dependents amidst increased economic hardship.

At the municipal level, this increase in the working population will also result in a larger base from which local authorities can collect revenue for basic services rendered and may alleviate some of the strain on the municipal budget.

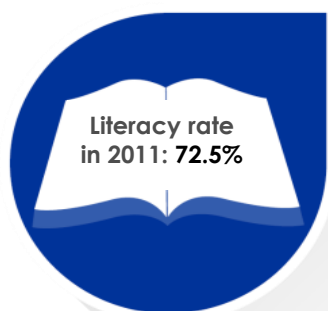
2

EDUCATION

Education and training improves access to employment opportunities and helps to sustain and accelerate overall development. It expands the range of options available from which a person can choose to create opportunities for a fulfilling life. Through indirect positive effects on health and life expectancy, the level of education of a population also influences its welfare.

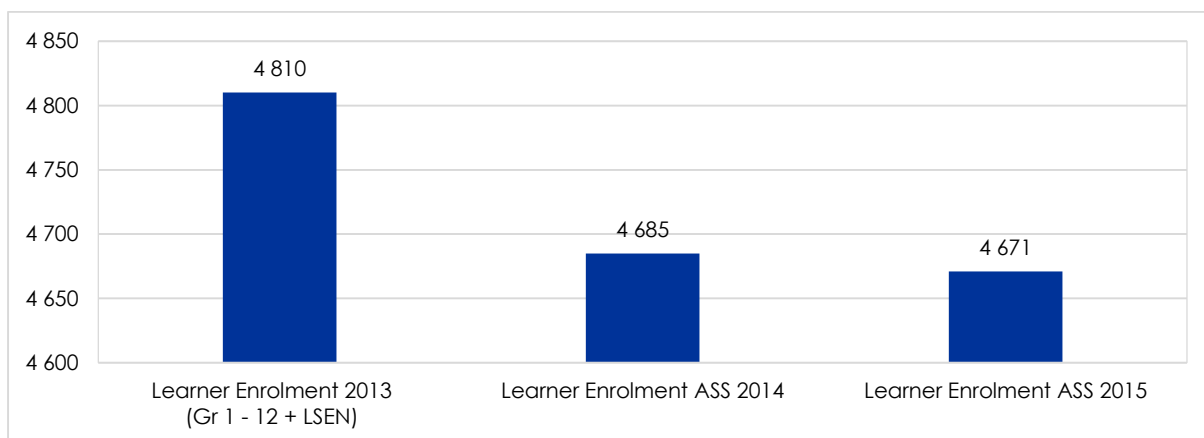


LITERACY



Literacy is used to indicate a minimum education level attained. A simple Literacy definition of literacy is the ability to read and write, but it is more strictly defined as the successful completion of a minimum of 7 years of formal education. Since most learners start school at the age of 7 years, the literacy rate is calculated as the proportion of those 14 years and older who have successfully completed a minimum of 7 years of formal education. The literacy rate in Kannaland was recorded at 72.5 per cent in 2011 which is significantly lower than the average literacy rates of the Eden district (82.6 per cent), Western Cape (87.2 per cent) and the rest of South Africa (80.9 per cent). This is mainly due to the rural setting of the area.

LEARNER ENROLMENT



Learner enrolment in schools within Kannaland declined at an annual average rate of 1.5 per cent between 2013 and 2015, which might be due to various factors including outmigration towards urban areas. Actual learner enrolment figures decreased by 14 from 2014 to 2015.

LEARNER-TEACHER RATIO



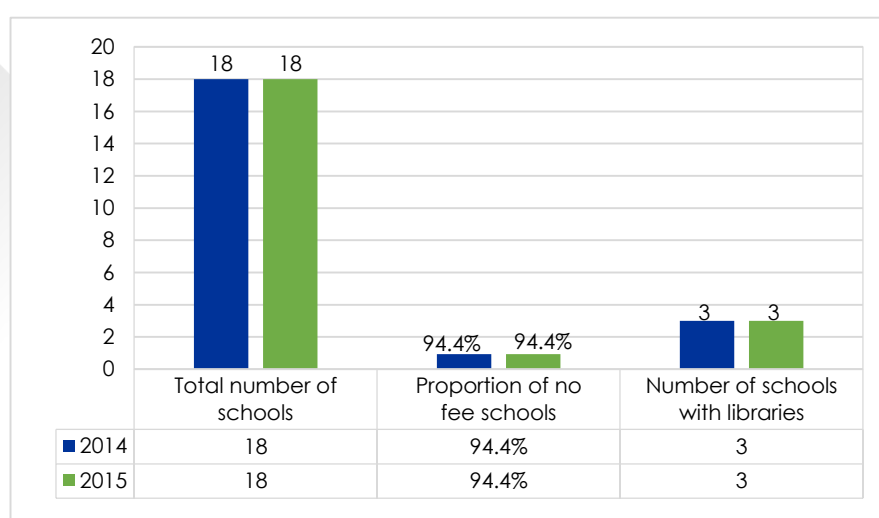
The learner-teacher ratio within Kannaland remained below 30 in 2012 and 2014 and increased slightly to 30.7 in 2013. The ratio further increased to 31.6 in 2015. According to the Department of Education the number of learners per teacher was 30.3 in 2010. Factors influencing the learner-teacher ratio are the ability of schools to employ more educators when needed and the ability to collect school fees.

GRADE 12 DROP-OUT RATES

The drop-out rate for learners within Kannaland that enrolled from Grade 10 in 2014 to Grade 12 in 2016 was recorded at 39.3 per cent. This is despite the fact that Kannaland has a very high percentage of no-fee schools in the District.

EDUCATIONAL FACILITIES

The availability of adequate education facilities such as schools, FET colleges and schools equipped with libraries and media centres could affect academic outcomes positively.

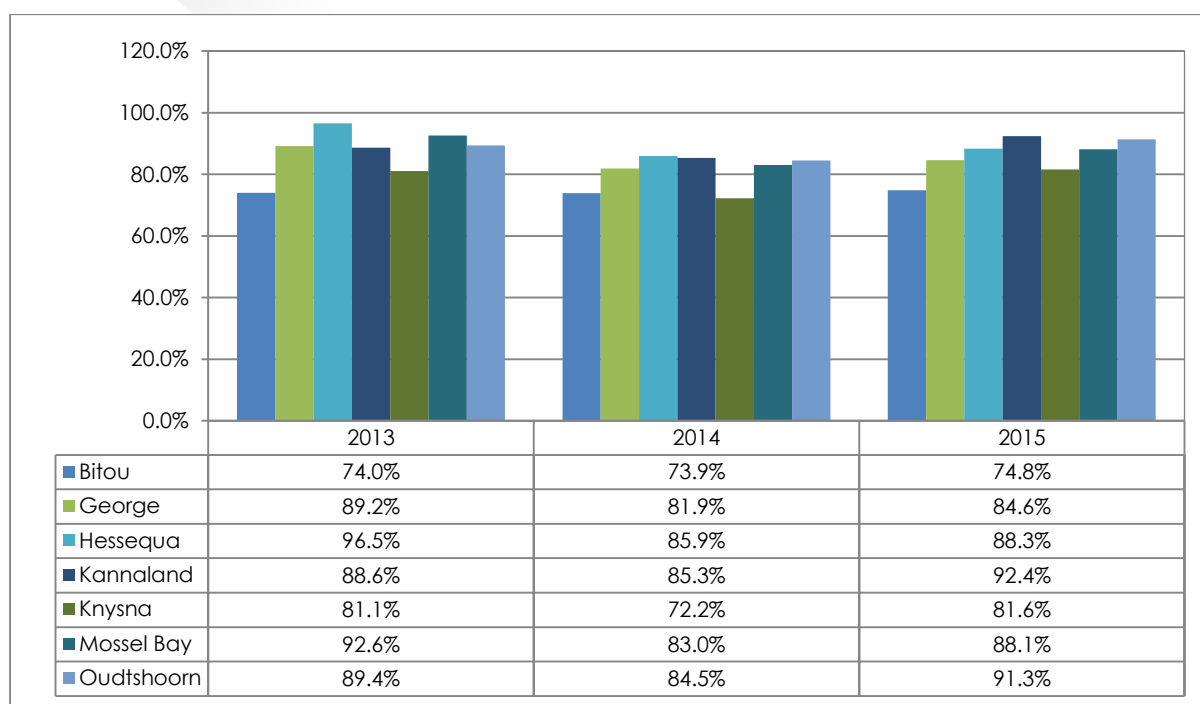


In 2015, there were 18 public schools in Kannaland which had to accommodate 4 671 learners at the start of 2015. The proportion of no-fee schools remained unchanged between 2014 and 2015, indicating that given the tough economic climate, schools have been reporting an increase in parents being unable to pay their school fees. In an effort to alleviate some of the funding challenges the Western Cape Education Department of (WCED) offered certain fee-paying schools to become no-fee schools. Only 3 out of the 18 public schools in Kannaland were equipped with libraries between 2014 and 2015.

EDUCATION OUTCOMES



Education remains one of the key avenues through which the state is involved in the economy. In preparing individuals for future engagement in the labour market, policy choices and decisions in the sphere of education play a critical role in determining the extent to which future economic and poverty reduction plans can be realised.



Kannaland's matric outcomes remained consistently above 85.0 per cent between 2013 and 2015, with a marked improved pass rate of 92.4 per cent recorded in 2015, following a slight deterioration between 2013 and 2014.

3

HEALTH

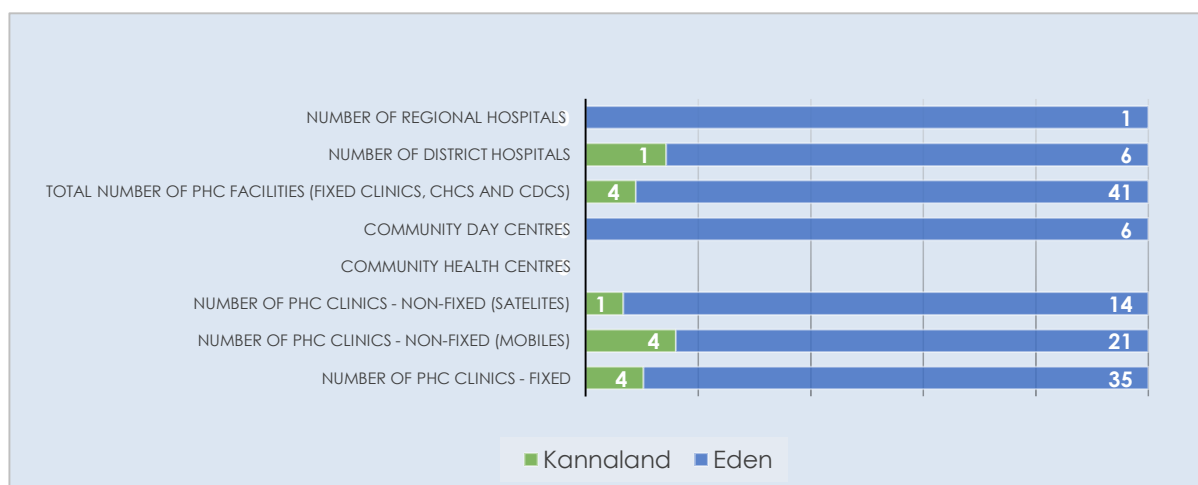
Good health is vital to achieving and maintaining a high quality of life. A diverse range of factors play a role in ensuring the good health of communities and that disease, especially preventable and contagious/communicable ones, are kept at bay. Some of the factors include lifestyle features that also depend on the provision of high quality municipal services, such as clean water, sanitation and the removal of solid waste.

The information provided by the Department of Health as detailed in this section, pertains only to public sector healthcare institutions. Any privately provided facilities or services are not reflected in the information below.



HEALTHCARE FACILITIES

All citizens' rights to access to healthcare services are directly affected by the number and spread of facilities within their geographical reach. South Africa's healthcare system is geared in such a way that people have to move from primary, with a referral system, to secondary and tertiary levels.



The Eden District has a range of primary healthcare facilities which includes 35 fixed clinics, 35 mobile/satellite clinics, 6 community day centres and 6 district hospitals. Of these facilities, 4 fixed clinics, 5 mobile/satellite clinics and 1 district hospital are situated within the Kannaland Municipality.

EMERGENCY MEDICAL SERVICES



Health Indicator	Kannaland	Eden
EMS Operational Ambulances	2	28
Population (2017)	25 248	427 742
No. of operational ambulances per 10 000 people	0.79	0.64

Access to emergency medical services is critical for rural citizens due to rural distances between towns and health facilities being much greater than in the urban areas. Combined with the relatively lower population per square kilometre in rural areas, ambulance coverage is greater in rural areas in order to maintain adequate coverage for rural communities. Within the Eden District, Kannaland has 0.79 ambulances per 10 000 population, higher than the District average of 0.64.

HIV/AIDS

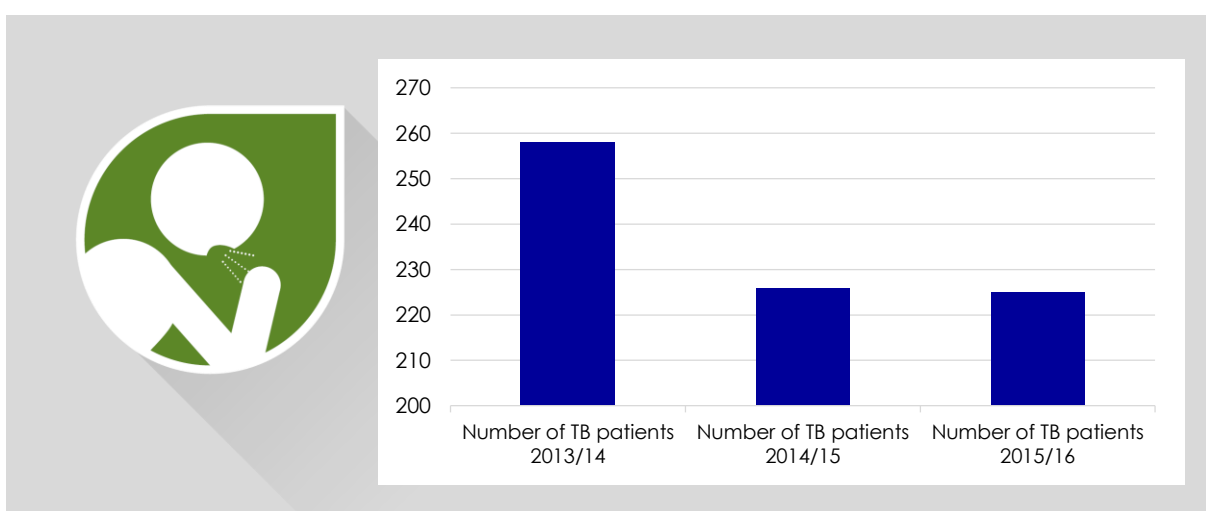


Health Indicator	Kannaland	Eden
Total registered patients receiving ART	386	17 391
No. of new ART patients	99	3 820
HIV Transmission Rate	0.0%	1.89%

At the end of March 2016, anti-retroviral treatment (ART) was provided to over 200 000 persons in the Province, 17 391 of whom were in the Eden District and 386 in the Kannaland municipal area. At the end of March 2016, Kannaland Municipality acquired 99 new ART patients, being treated from 5 treatment sites.

In addition to improving the quality of life of the patient, anti-retroviral treatment to mothers both before and at birth, also decreases the chances that infants will contract HIV from their mothers. The most recent information for Kannaland indicates a mother-to-child transmission rate of zero per cent which is lower than the 1.89 per cent District and 1.4 per cent Provincial rate as well as the medium term annual target for 2015/16 and 2016/17.

TUBERCULOSIS (TB)



The number of TB patients in the Eden District has increased over the past few years, reaching 4 909 in 2015/16, treated at 90 clinics or treatment sites. In the Kannaland municipal area, patient load has been on a steady decline the last three years. Most recent information shows a patient load of 225 with treatment administered from 8 clinics or treatment sites.

CHILD HEALTH



Health Indicator	Kannaland	Eden
Immunisation	81.6%	84.1%
Malnutrition	2.2	7.2
Neonatal mortality rate	11.2	6.4
Low birth weight	24.0%	16.0%

In 2015, the full **immunisation coverage rate** for Eden was 84.1 per cent. In Kannaland it was lower at 81.6 per cent, showing a deterioration from the 2014 rate of 84.0 per cent.

The number of **malnourished children** under five years in Eden in 2015 was 7.2 per 100 000 children. Kannaland's rate is currently at 2.2 which is much lower when compared to the District.

The District's **neonatal mortality rate** (6.4) is slightly above the Province's 2019 target of 6.0 per 1 000 live births. Kannaland's rate at 11.2 is much higher than the District rate however the rate has shown an improvement from the 2014 rate of 14.2.

In the Eden District, 16.0 per cent of the babies born were born **underweight**; at 24.0 per cent, Kannaland's rate is much higher than the Provincial average of 14.5 per cent.

DEFINITIONS

Immunisation: Immunisation protects both adults and children against preventable infectious diseases. Low immunisation rates speak to the need for parents to understand the critical importance of immunisation, as well as the need to encourage parents to have their young children immunised.

Malnutrition: Malnutrition (either under- or over nutrition) refers to the condition whereby an individual does not receive adequate amounts or receives excessive amounts of nutrients.

Neonatal mortality rate: The first 28 days of life – the neonatal period - represent the most vulnerable time for a child's survival. The neonatal mortality rate is the number of neonates dying before reaching 28 days of age, per 1 000 live births in a given year. The Province has a target of 6.0 per 1 000 live births by 2019.

Low birth weight: Low birth weight is defined as weight at birth of less than 2 500 g. Low birth weight is associated with a range of both short- and long term consequences.

MATERNAL HEALTH



Health Indicator	Kannaland	Eden
Maternal Mortality Ratio	0.0	69.9
Delivery Rate to Women under 18 years	7.7%	6.80%
Termination of Pregnancy Rate	0.0	0.5

Maternal mortality rate: Kannaland Municipality's most recent figures show a maternal mortality ratio of 0.0 per 100 000 live births compared to the District's ratio of 69.9. The Province has a maternal mortality ratio target of 65 by 2019.

Births to teenage mothers: In the 2015/16 financial year, the delivery rate to women under 18 years in Eden was 6.80 per cent. At 7.7 per cent, Kannaland's rate is higher than the District rate.

Termination of pregnancy: Kannaland's termination of pregnancy rate of 0.0 per cent per 1 000 live births is lower than the District's 0.5 per cent.

Overall most of the indicators for child and maternal health have improved in the last year which reflects that Kannaland is progressing in terms of its health outcomes. A concern is with regards to its immunisation coverage rate which has decreased in the last year as well as its low birth weight rate which has increased and is substantially higher than the District's rate.

DEFINITIONS

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period.

Maternal mortality rate: Maternal death is death occurring during pregnancy, childbirth and the puerperium of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy and irrespective of the cause of death (obstetric and non-obstetric).

Births to teenage mothers: Teenage pregnancy is almost always unplanned; as a result when young parents are placed in a position to care for their children, life can become particularly tough, especially if they do not have family or social support.

Termination of pregnancy: Government hospitals, designated private doctors and gynaecologists, and non-profit providers offer safe and legal termination of pregnancy. To have a free abortion, the request must be made at a primary healthcare clinic, where the pregnancy will be confirmed, counselling provided, and appointment made, and a referral letter be given to a facility where the procedure can be performed.

4

POVERTY

The intensity of poverty as well as the poverty headcount of municipalities is analysed in this section. The intensity of poverty is measured by calculating the Poverty Gap Index, which is the average poverty gap in the population as a proportion of the poverty line. The Poverty Gap Index estimates the depth of poverty by considering how far, on the average, the poor are from that poverty line. The Poverty Gap Index is a percentage between 0 and 100 per cent. A theoretical value of zero implies that no one in the population is below the poverty line. Individuals whose income is above the poverty line have a gap of zero while individuals whose income is below the poverty line would have a gap ranging from 1 per cent to 100 per cent, with a theoretical value of 100 per cent implying that everyone in the population has an income that is below the poverty line or zero. A higher poverty gap index means that poverty is more severe.

This section also provides information on annual household income for residents living within the Kannaland municipal area. Poverty tends to be prevalent in areas where the majority of households fall within the low income bracket.



POVERTY HEADCOUNT AND INTENSITY

The number of poor people within the Kannaland municipal area decreased from 2.5 per cent of the population in 2011 to 1.2 per cent in 2016. The decreasing poverty headcount is positive as it means less strain on municipal resources.

Area	Poverty Headcount (Percentage)		Poverty Intensity (Percentage)	
	2011	2016	2011	2016
Kannaland	2.5	1.2	38.5	36.3
Eden District	3.9	2.2	42.2	40.5
Western Cape	3.6	2.7	42.6	40.1

The intensity of poverty, i.e. the proportion of poor people that are below the poverty line, within the Kannaland municipal area also decreased from 38.5 per cent in 2011 to 36.3 per cent in 2016. This percentage is still high and should be moving towards zero as income of more households within the Kannaland municipal area moves away from the poverty line.

HOUSEHOLD INCOME

The annual income for households living within the Kannaland municipal area is divided into three categories i.e. the proportion of people that fall within the low, middle and high income brackets. Poor households fall under the low income bracket, which ranges from no income to just over R50 000 annually (R4 166 per month). An increase in living standards can be evidenced by a rising number of households entering the middle and high income brackets.

Amount (2016)	Eden District	Kannaland	
No income	13.4	8.7	Low income
R1 – R6 327	2.8	2.1	
R6 328 – R12 653	4.4	4.1	
R12 654 – R25 306	14.3	21.1	
R25 307 – R50 613	19.8	27.8	
R50 614 – R101 225	16.9	17.4	Middle Income
R101 226 – R202 450	12.0	9.2	
R202 451 – R404 901	9.0	6.5	
R404 902 – R809 802	5.1	2.1	High income
R809 803 – R1 619 604	1.5	0.7	
R1 619 605 – R3 239 208	0.5	0.2	
R3 239 209 or more	0.3	0.2	

Approximately 63.8 per cent of households in Kannaland fall within the low income bracket, of which 8.7 per cent have no income. A sustained increase in economic growth within the Kannaland municipal area is needed if the 2030 NDP income target of R110 000 per person, per annum is to be achieved.

INDIGENT HOUSEHOLDS

The Non-Financial Census of Municipalities released by Statistics South Africa in 2016 indicates increases or decreases of indigent households per municipal area between 2014 and 2015.

Area	2014	2015	Change
Kannaland	1 774	1 880	106
Eden District	41 357	44 222	2 865
Western Cape	413 259	360 238	-53 021

The Kannaland municipal area experienced an increase in the number of indigents (106) between 2014 and 2015, which implies an increased burden on municipal resources.

5

BASIC SERVICE DELIVERY

Access to basic services within South Africa is a basic human right. It is also an indication of the quality of life of the inhabitants in the country. The extent of human development within a municipality is largely influenced by access to housing and associated basic services such as water, electricity, sanitation and refuse removal, with high access levels implying better human development and vice versa. The profile uses data from Census 2011 and the Community Survey of 2016 for the analysis of access to basic services.

Please note: Access level definitions for water and electricity were phrased differently in the respective Census 2011 and Community Survey 2016 questionnaires.



ACCESS TO WATER



SERVICE STANDARD DEFINITION: Households with access to piped water inside the dwelling or yard or within 200 metres from yard.

Area	2011	2016	% Change
Eden District	160 253	183 441	14.5
Kannaland	5 949	5 925	- 0.4

Statistics South Africa estimates that the number of households in the municipal area was 6 212 in 2011 and 6 333 in 2016. Of the 6 212 households in 2011, 5 949, or 95.8 per cent, had access to piped water inside their dwelling or yard or within 200 metres. In 2016, a total of 5 925 (93.6 per cent) households enjoyed such access whilst 408 (6.4 per cent) of households however still do not have access to piped water. This decrease in water access (as per the specified standard) can be attributed to the fact that Census 2011 and the 2016 Community Survey used different definitions for access to water. This decrease is also in stark contrast to the District who managed an overall increase of 14.5 per cent from 160 253 in 2011 to 183 441 in 2016.

ACCESS TO ELECTRICITY



SERVICE STANDARD DEFINITION: Households with access to electricity as primary source of energy for lighting purposes.

Area	2011	2016	% Change
Eden District	149 435	181 973	21.8
Kannaland	5 571	5 890	5.7

The biggest source of energy for lighting purposes in Kannaland in 2016 is electricity with 5 890 households (93.0 per cent) having access to this energy source compared to 5 571 (89.7 per cent) in 2011. This equates to an increase of 5.7 per cent in the number of households that enjoy access to electricity between 2011 and 2016. A total of 7.0 per cent of households (444) in 2016 however still make use of other sources of energy i.e. sources which they do not pay for, generators, solar home systems, battery and no access to electricity.

The percentage change in the number of households that enjoy access to electricity for lighting purposes throughout the District has been impressive, increasing by 21.8 per cent from 149 435 in 2011 to 181 973 in 2016.

ACCESS TO SANITATION



SERVICE STANDARD DEFINITION: *Households with access to flush toilet connected to sewerage system.*

Area	2011	2016	% Change
Eden District	140 751	178 646	26.9
Kannaland	4 635	5 425	17.0

Access to sanitation services within the Kannaland region improved notably between 2011 and 2016. The percentage of households with access to a flush toilet connected to sewage system/chemical toilet improved from 74.6 per cent in 2011 to 85.7 per cent in 2016 reflecting an increase in access of 790 households (17.0 per cent increase off the 2011 base). Kannaland's access level in 2016 (85.7 per cent) is however lagging behind that of the Eden District with 94.4 per cent access.

Alarming, a total of 909 households (14.3 per cent of total households) within Kannaland currently still have to make use of other sanitation services i.e. to toilet facilities other than flushed and chemical (i.e. pit latrine, ecological toilets, bucket toilets or none).

ACCESS TO REFUSE REMOVAL



SERVICE STANDARD DEFINITION: *Households whose waste is removed by local authority at least weekly.*

Area	2011	2016	% Change
Eden District	141 772	168 079	18.6
Kannaland	4 109	5 018	22.1

There has been a significant improvement between 2011 and 2016 in the number of households within Kannaland that receives refuse removal services by the local authority at least once a week – 5 018 households currently (2016) enjoy such services, compared to 4 109 in 2011 which equates to a 22.1 per cent increase.

Despite this progress, only 79.2 per cent of the total number of households in Kannaland currently have their refuse removed at least once a week which is notably lower than the District's 88.8 per cent. It is of concern to note that 16.2 per cent of households (1 023 households) in Kannaland still currently have to make use of communal/own refuse dumps. In addition, 1.9 per cent of households (123) has to make use of other refuse removal options or does not have access to any rubbish disposal services.

ACCESS TO HOUSING



SERVICE STANDARD DEFINITION: *Households with access to formal dwelling.*

Area	2011	2016	% Change
Eden District	137 447	162 325	18.1
Kannaland	5 984	6 171	3.1

The majority of households (6 171 households or 97.4 per cent) in Kannaland currently reside in formal dwellings, compared to 5 984 (94.5 per cent) in 2011. This equates to a 3.1 per cent change in terms of the number of households. In comparison, 85.7 per cent of households (162 325) in the District currently reside in formal dwellings, up from 137 447 (83.8 per cent) in 2011 which translates to an impressive 18.1 per cent increase off the 2011 base.

A total of 2.6 per cent of households in Kannaland currently reside in either an informal (111), or other (52) dwellings.

6

SAFETY AND SECURITY

The Constitution upholds the notion that everybody has the right to freedom and security of the person. The safety of persons and property is therefore vitally important to the physical and emotional well-being of people and business. Without the respect of person and property, it would be impossible for people to live peacefully, without fear of attack and for businesses to flourish.

The extent of crime in South Africa does however not only have a significant impact on the livelihood of citizens, but also affects the general economy. Crime hampers growth and discourages investment and capital accumulation. If not addressed with seriousness, it has the potential to derail both social and economic prosperity.

People's general impressions, as well as official statistics on safety and crime issues, mould perceptions of areas as living spaces or place in which to establish businesses. The discussion in this section that follows is limited to the reported contact and property-related crime such as murder and sexual crimes, as well as crime heavily dependent on police action for detecting drug-related crimes and driving under the influence of alcohol/drugs.



MURDER



Area	2015	2016	% Change
Eden District (per 100 000)	26	33	27.6
Kannaland (per 100 000)	33	36	8.2

Definition: Murder is a social contact crime resulting in the loss of life of the victim, but excludes cases where the loss of life occurred as a result of a response to a crime, for example self-defence.

The murder rate per 100 000 people in Kannaland increased by 8.2 per cent from 33 reported cases in 2015 to 36 in 2016. In comparison, the murder rate across the broader Eden District increased quite substantially in a short space of time by 27.6 per cent from 26 reported cases per 100 000 people in 2015 to 33 in 2016.

SEXUAL OFFENCES



Area	2015	2016	% Change
Eden District (per 100 000)	169	152	-9.7
Kannaland (per 100 000)	138	104	-24.6

Definition: Sexual offences includes rape (updated to the new definition of rape to provide for the inclusion of male rape), sex work, pornography, public indecency and human trafficking.

The number of sexual related offences per 100 000 people decreased notably within the broader Eden District from 145 reported cases in 2015 to 132 in 2016. This equates to a 9.0 per cent decrease. Kannaland's sexual offences rate decreased more significantly by 25.7 per cent between 2015 (35) and 2016 (26). The total number of offences per 100 000 population in Kannaland for 2016 (26) remain far below the District average of 132.

DRUG-RELATED CRIMES



Area	2015	2016	% Change
Eden District (per 100 000)	1 529	1 584	3.6
Kannaland (per 100 000)	1 798	1 992	10.8

Definition: Drug-related crimes refers to the situation where the perpetrator is found to be in possession of, under the influence of, or selling illegal drugs. This is a crime detected through police activity rather than reports by members of the public.

Drug-related crimes – possession, manufacturing, distribution of illegal substances (including alcohol related transgressions) – is on the rise throughout the Eden District with an average of 1 373 crimes per 100 000 people in 2016, which equates to a 4.7 per cent increase from the 1 312 reported cases in 2011.

Considering Kannaland's relatively small population, it is a concern to note that drug-related offences has increased considerably by 11.3 per cent from 2015 to present. In comparison to the District's average number of reported cases per 100 000 people in 2016 (1 373), drug-related incidences are however still relatively low at 502.

DRIVING UNDER THE INFLUENCE

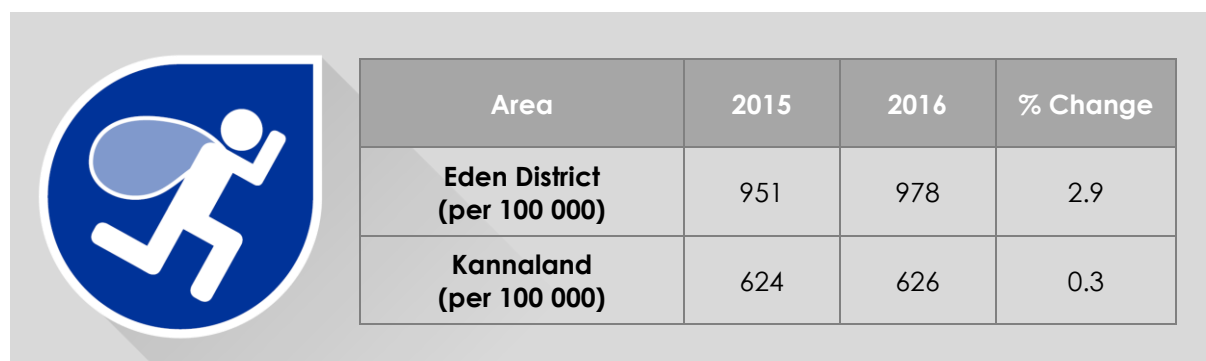


Area	2015	2016	% Change
Eden District (per 100 000)	254	247	-2.9
Kannaland (per 100 000)	129	106	-17.4

Driving under the influence (DUI): DUI refers to a situation where the driver of a vehicle is found to be over the legal blood alcohol limit. This is a crime detected through police activity rather than reports by members of the public.

The number of reported cases per 100 000 people driving under the influence of either alcohol or drugs throughout the Eden District decreased slightly to the extent of 1.8 per cent between 2015 (218) and 2016 (214). Reported cases decreased significantly within the Kannaland region from 32 incidences in 2015 to 27 in 2016 which equates to a 15.6 per cent decrease between the two comparative years. This decrease can amongst other factors be attributed to visible policing strategies and campaigns to change this behaviour.

RESIDENTIAL BURGLARIES



Definition: Residential burglary is defined as the unlawful entry of a residential structure with the intent to commit a crime, usually a theft.

Given its regular occurrence and the psychological impact on victims, residential burglaries are an obstinate concern in South Africa. It is therefore of great concern to note that the number of burglaries per 100 000 people in the broader Eden District increased by 4.0 per cent from 2015 to 2016.

Reported incidences in Kannaland also increased, albeit marginally (by 0.63 per cent) from 157 cases in 2015 to 158 in 2016. Kannaland's residential burglaries crime rate remains significantly below the District average.

7

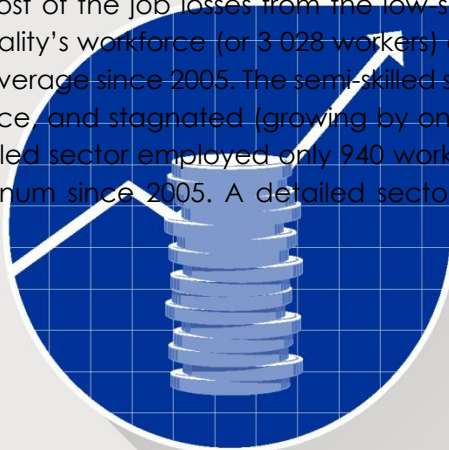
THE ECONOMY

Economic growth at the municipal level is essential for the attainment of economic development, the reduction of poverty and improved accessibility. Fostering this growth requires an in-depth understanding of the economic landscape within which each respective municipality operates.

Kannaland comprised R828.07 million (or 2.8 per cent) of the District's total R29.65 billion GDP as at the end of 2015. GDP growth averaged 3.6 per cent per annum over the period 2005 - 2015. This is marginally above the District average of 3.5 per cent per annum over this period. Average annual growth of 2.5 per cent per annum in the post-recessionary period is nevertheless below the long-term trend and District average of 2.6 per cent per annum over the period 2010 – 2015.

Kannaland employed 4.4 per cent (9 797 labourers) of the Eden District's labour force in 2015, and employment grew at a moderate pace, averaging 1.4 per cent per annum since 2005 (which was below the overall District employment growth rate of 2.0 per cent per annum over this period). Employment growth has nevertheless picked up significantly in the post-recessionary period (2010 - 2015) averaging 3.0 per cent per annum. Kannaland has experienced significant job losses prior to and during the recession, but these jobs have been recovered and approximately 1 415 (net) additional jobs have been created since 2005.

The majority (39.0 per cent or 3 824 workers) of the workforce in Kannaland operates within the informal sector, which has expanded by 8.3 per cent per annum on average since 2005. The informal sector absorbed most of the job losses from the low-skilled sector, which makes up 30.9 per cent of the municipality's workforce (or 3 028 workers) and which has contracted by 2.4 per cent per annum on average since 2005. The semi-skilled sector employed 20.5 per cent of the municipality's workforce, and stagnated (growing by only 0.2 per cent per annum on average since 2005). The skilled sector employed only 940 workers, and grew at a moderate rate of 1.6 per cent per annum since 2005. A detailed sectoral analysis is provided in the ensuing section.



PRIMARY SECTOR

Agriculture, Forestry and Fishing

This industry comprised R150.48 million (or 18.2 per cent) of the Municipality's GDP in 2015. It displayed moderate growth of 1.4 per cent per annum for the period 2005 – 2015. Growth has nevertheless deteriorated since the recession (the industry has been contracting by 0.9 per cent per annum on average since 2010).

Agriculture, forestry and fishing employed 29.1 per cent of the Municipality's workforce. Employment over the period 2005 – 2015 has contracted by 2.6 per cent per annum on average. Employment growth nevertheless rebounded and grew at a rate of 2.9 per cent per annum on average since 2010, which is significantly higher. Despite the post-recessionary improvement, not all the jobs lost prior to and during the recession have been recovered, and 1 001 jobs have been lost on net since 2005.

The majority (63.6 per cent or 1 815 workers) of the workforce in agriculture, forestry and fishing operate within the low-skill sector, which has experienced growth of 2.8 per cent since 2010. The semi-skilled sector employs 442 workers and has grown at a rate of 3.0 per cent per annum since 2010. Despite the strong post-recession employment growth, employment within these two categories has contracted over the long term (2005 – 2015). The skilled sector employs the smallest proportion of the municipality's workforce (2.8 per cent or 81 workers). This segment has shown robust growth post-recession (this growth nevertheless stemming from a small base). Skilled employment within Kannaland's agricultural industry has nevertheless also contracted over the long term. The informal sector makes up 18.1 per cent of the industry's workforce and was the only employment category to experience long term growth as employment grew at a moderate rate of 0.8 per cent per annum over the period 2005 – 2015. Informal employment within the agriculture, forestry and fishing industry furthermore experienced robust growth of 2.9 per cent per annum since 2010.

GDP		2015	Trend 2005 – 2015	Recovery 2010 – 2015
		R150.48 million	1.4%	-0.9%
Employment		2 855	-2.6%	2.9%
Skill Levels	Skilled	81	-3.2%	3.0%
	Semi-skilled	442	-3.0%	3.0%
	Low-skilled	1 815	-3.2%	2.8%
	Informal	517	0.8%	2.9%

SECONDARY SECTOR

Manufacturing

This industry comprised R102.16 million (or 12.3 per cent) of the Municipality's GDP in 2015. It contracted by 0.1 per cent per annum for the period 2005 – 2015. The manufacturing industry employed 6.0 per cent of the Municipality's workforce. Employment has contracted at a rate of 1.2 per cent per annum over the period 2005 – 2015. Overall only 123 (net) jobs have been lost in the manufacturing industry since 2005.

The majority of the workers employed in the manufacturing sector are classified as semi-skilled (40.0 per cent). Semi-skilled employment contracted by 1.2 per cent per annum since 2005. Low-skilled employment makes 23.5 per cent of the industries workforce and contracted by 4.3 per cent per annum over the period 2005 – 2015 (the sharpest contraction among the various skill categories). Only 5.8 per cent of those employed in the manufacturing industry are categorised as skilled workers. Skilled employment contracted by 1.6 per cent per annum over the period 2005 – 2015. Approximately 30.7 per cent of the workforce found employment within the informal sector. The informal sector was the only category to experience long term employment growth, averaging 2.9 per cent per annum over the period 2005 – 2015. Employment growth within the informal sector nevertheless deteriorated in the latter half of the decade (2010 – 2015).

GDP		2015	Trend 2005 – 2015	Recovery 2010 – 2015
		R102.16 million	-0.1%	-1.1%
Employment		583	-1.2%	-1.1%
Skill Levels	Skilled	34	-1.6%	-0.9%
	Semi-skilled	233	-1.2%	-1.2%
	Low-skilled	137	-4.3%	-4.3%
	Informal	179	2.9%	2.4%

Construction

The construction industry comprised R35.94 million (only 4.3 per cent) of the Municipality's GDP in 2015. Construction has been the fastest growing industry over the long term (2005 – 2015), with growth averaging 8.4 per cent per annum. This growth however stems from a relatively small base. GDP growth within Kannaland's construction industry has nevertheless slowed since the recession and averaged 3.7 per cent over the period 2010 – 2015 as the sector struggles to fully recover after the recession.

The construction industry employed only 6.9 per cent of the Municipality's workforce in 2015. Employment growth in the Municipality's construction sector has averaged 6.7 per cent per annum since 2005. Approximately 282 jobs have been created on net since 2005, the majority of which were created over the period 2010 – 2015 (when employment growth averaged 5.9 per cent per annum).

The majority (67.9 per cent) of the workers employed in the construction industry operate within the informal sector. Employment growth within this sector has been consistently high since 2005. Low-skilled employment makes up only 8.5 per cent of the industry's workforce, and employment within this category has contracted at a rate of 1.6 per cent per annum on average over the period 2005 – 2015. Low-skilled employment worsened post-recession, as employment within this category contracted by 3.8 per cent per annum since 2010. Workers employed in this sector who have lost their jobs may have found employment in the informal sector. Semi-skilled employment makes up 20.1 per cent of the industry's workforce, whilst skilled employment makes up only 3.6 per cent. Semi-skilled employment growth averaged 2.8 per cent per annum over the period 2005 – 2015, whilst skilled employment experienced robust growth of 6.8 per cent over the past decade. This growth however stemming from a relatively small base. Employment growth within the skilled and semi-skilled sectors of the construction industry tapered downward post-recession.

GDP		2015	Trend 2005 – 2015	Recovery 2010 – 2015
		R35.94 million	8.4%	3.7%
Employment		673	6.7%	5.9%
Skill Levels	Skilled	24	6.8%	3.3%
	Semi-skilled	135	2.8%	1.1%
	Low-skilled	57	-1.6%	-3.8%
	Informal	457	10.7%	10.0%

TERTIARY SECTOR

Commercial Services

Commercial services encompass the wholesale & retail trade, catering & accommodation, Transport, storage & communication and finance, insurance, real estate & business services industries. This sector comprised R377.22 million (or 45.6 per cent) of the Municipality's GDP in 2015 (the largest industry in the region). The industry grew by 7.2 per cent per annum on average over the period 2005 – 2015, far outstripping the overall municipal growth rate of 3.6 per cent per annum over this period. Growth in the latter half of the decade averaged 6.1 per cent per annum, below the industry's long-term trend, but nevertheless significantly above the municipal average of 2.5 per cent over this period.

The commercial services industry employed 37.3 per cent of the Municipality's workforce (making it the Municipality's largest employer). The industry has experienced robust employment growth throughout the past decade. Employment growth averaged 6.8 per cent per annum over the period 2005 – 2015, which is above the overall municipal employment growth rate of 1.4 per cent per annum over the same period. Employment growth tapered downward in the post-recessionary period (2010 – 2015), but remained strong. Approximately 1 657 (net) jobs were created in the commercial service industry since 2005.

Approximately 22.4 per cent of the industry's workforce is classified as semi-skilled, while 10.6 per cent is classified as low-skilled and 11.3 per cent is classified as skilled. The semi-skilled and skilled workforce has experienced strong employment growth both prior to and post-recession, whilst the low-skilled sector experienced moderate growth of 2.3 per cent per annum on average since 2005. Informal employment within the commercial services industry makes up the majority (55.7 per cent) of the industry's workforce and has shown robust growth of 11.8 per cent per annum since 2005, and significantly lower (but still robust) growth averaging 5.7 per cent per annum over the period 2010 - 2015. The informal sector is responsible for the majority of the new jobs created in the industry.

GDP		2015	Trend 2005 – 2015	Recovery 2010 – 2015
		R377.22 million	7.2%	6.1%
Employment		3 656	6.8%	4.2%
Skill Levels	Skilled	412	3.8%	3.2%
	Semi-skilled	820	3.2%	2.6%
	Low-skilled	389	2.3%	1.8%
	Informal	2 035	11.8%	5.7%

Government and Community, Social and Personal Services

The general government & community, social and personal services industry comprised 16.4 per cent (or R136.12 million) of the Municipality's overall GDP in 2015. The industry experienced moderate GDP growth of 1.8 per cent per annum over the period 2005 – 2015 and a markedly lower rate of 1.2 per cent per annum since 2010. The government and community, social and personal services industry was the third largest contributor to the overall municipal GDP figure within Kannaland.

The industry employs a noteworthy share (20.4 per cent) of the Municipality's workforce and its employment growth over the period 2005 – 2015 (averaging 3.4 per cent per annum) exceeds the overall municipal employment growth rate of 1.4 per cent per annum over the same period. Employment growth has tapered down to 2.4 per cent per annum since the recession (2010 – 2015). Approximately 588 (net) jobs were created in the government and community, social and personal services industry since 2005.

Approximately 30.8 per cent of the industry's workforce is classified as low-skilled, while 18.4 per cent is categorised as semi-skilled and 19.2 per cent is classified as skilled. Employment in the skilled category grew moderately at 1.4 per cent per annum over the period 2005 – 2015, whilst semi-skilled employment experienced a slightly weaker growth rate of 1.2 per cent per annum on average over the same period. Skilled and semi-skilled employment growth tapered downward to 1.1 per cent and 0.8 per cent per annum on average respectively post-recession (2010 – 2015). The low-skilled workforce stagnated (growing by only 0.3 per cent per annum over the period 2005 – 2015). Low-skilled employment contracted marginally by 0.2 per cent per annum post-recession. The informal sector employed 31.6 per cent of the industry's workforce, but grew at a rate of 16.0 per cent per annum over the period 2005 – 2015. The informal sector is responsible for the majority of the new jobs created in the general government & community, social and personal services industry since 2005.

GDP		2015	Trend 2005 – 2015	Recovery 2010 – 2015
		R136.12 million	1.8%	1.2%
Employment		1 994	3.4%	2.4%
Skill Levels	Skilled	383	1.4%	1.1%
	Semi-skilled	366	1.2%	0.8%
	Low-skilled	615	0.3%	-0.2%
	Informal	630	16.0%	8.3%

8

BROADBAND

As broadband penetration is an official Western Cape Government (WCG) Game Changer, the Province has a broadband vision that by 2030, every citizen in every town and village will have access to affordable high speed broadband infrastructure and services, will have the necessary skills to be able to effectively utilise this infrastructure and is actively using broadband in their day to day lives.

Striving towards this vision, the WCG aims to by 2020 improve business competitiveness and the livelihoods of citizens through various broadband initiatives. This 2020 objective includes the goal of increasing internet penetration in the Province to 70 per cent. The WCG has allocated R1.6 billion towards this Game Changer across the 2016 MTEF.

One such initiative entails the establishment of a Wi-Fi hotspot at a provincial government building (schools, libraries, clinics, community centres and other public facilities) in each ward of each local municipality across the Province. These hotspots will allow limited access (250 Mb per month) to each user, as well as to allow free of charge access to all gov.za websites.

Although there are currently no WCG Wi-Fi hotspots within the Kannaland region, a hotspot will be installed in all of the Municipality's four (4) wards by 1 March 2018.



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1. Demographics

- Population breakdown: *Department of Social Development, 2016*
- Age distribution: *Department of Social Development, 2016*
- Households: *Statistics South Africa, Community Survey 2016*
- Age cohorts: *Department of Social Development, own calculations, 2016*

2. Education

- Literacy: *Statistics South Africa, Census 2011*
- Learner enrolment: *Western Cape Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015*
- Learner-teacher ratio: *Western Cape Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015*
- Grade 12 drop-out rates: *Western Cape Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015*
- Educational facilities: *Western Cape Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015*
- Educational outcomes: *Western Cape Education Department, 2016; Annual Survey of Public and Independent Schools (ASS), 2015*

3. Health

- Healthcare facilities: *Department of Health, 2016*
- Emergency medical services: *Department of Health, 2016*
- HIV/AIDS: *Department of Health, 2016*
- Tuberculosis: *Department of Health, 2016*
- Child health: *Department of Health, 2016*
- Maternal health: *Department of Health, 2016*

4. Poverty

- Poverty headcount and intensity: *Statistics South Africa, Community Survey 2016*
- Household income: *Department of Social Development, 2016; Quantec, 2016*
- Indigent households: *Statistics South Africa, 2016; Non-financial Census of Municipalities, 2015*

SOURCES

5. Basic Services

- Access to water: *Statistics South Africa, Census 2011 and Community Survey 2016*
- Access to electricity: *Statistics South Africa, Census 2011 and Community Survey 2016*
- Access to sanitation: *Statistics South Africa, Census 2011 and Community Survey 2016*
- Access to refuse removal: *Statistics South Africa, Census 2011 and Community Survey 2016*
- Access to housing: *Statistics South Africa, Census 2011 and Community Survey 2016*

6. Safety and Security

- Murder: *South African Police Service (SAPS), 2016; Statistics South Africa, 2016*
- Sexual offences: *South African Police Service (SAPS), 2016; Statistics South Africa, 2016*
- Drug-related crimes: *South African Police Service (SAPS), 2016; Statistics South Africa, 2016*
- Driving under the influence: *South African Police Service (SAPS), 2016; Statistics South Africa, 2016*
- Residential burglaries: *South African Police Service (SAPS), 2016; Statistics South Africa, 2016*

7. Economy

- Primary Sector: *Municipal Economic Review and Outlook (MERO), 2016*
- Secondary Sector: *Municipal Economic Review and Outlook (MERO), 2016*
- Tertiary Sector: *Municipal Economic Review and Outlook (MERO), 2016*

8. Broadband

- Wi-Fi: *Department of Economic Development and Tourism, 2016*

