



**land reform &
rural development**

Department:
Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

DRAFT BOJANALA PLATINUM DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

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REPUBLIC OF SOUTH AFRICA

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



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ABBREVIATIONS/ACRONYMS

AAMP	AGRICULTURE AND AGRO-PROCESSING MASTER PLAN
BEMF	BOJANALA ENVIRONMENTAL MANAGEMENT FRAMEWORK
BIC	BUSHVELD IGNEOUS COMPLEX
BPDM	BOJANALA PLATINUM DISTRICT MUNICIPALITY
BPDMSDF	BOJANALA PLATINUM DISTRICT MUNICIPALITY
CBA	CRITICAL BIODIVERSITY AREAS
CSIR	COUNCIL FOR SCIENTIFIC & INDUSTRIAL RESEARCH
DMR	DEPARTMENT OF MINERAL RESOURCES & ENERGY
DLLRD	DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT
DPME	DEPARTMENT OF PLANNING MONITORING AND

	EVALUATION
DRC	DEMOCRATIC REPUBLIC OF CONGO
DTIC	DEPARTMENT OF TRADE INDUSTRY AND COMPETITION
EMF	ENVIRONMENTAL MANAGEMENT FRAMEWORK
ESA	ECOLOGICAL SENSITIVE AREA
FPSU	FARMERS PRODUCT SUPPORT UNIT FRAMEWORK
GDP	GROSS DOMESTIC PRODUCT
GGP	GROSS GEOGRAPHIC PRODUCT
ICT	INFORMATION & COMMUNICATION TECHNOLOGY
IDA	INFRASTRUCTURE DEVELOPMENT ACT
IDP	INTEGRATED DEVELOPMENT PLAN
IRDSS	INTEGRATED RURAL DEVELOPMENT SECTOR STRATEGY
KRLM	KGETLENGRIVIER LOCAL MUNICIPALITY
MDLM	MADIBENG LOCAL MUNICIPALITY SPATIAL
MKLM	MOSES KOTANE LOCAL MUNICIPALITY
MLM	MORETELE LOCAL MUNICIPALITY
MPA	MARINE PROTECTED AREAS



MPRDA	MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT	PDP	PROVINCIAL DEVELOPMENT PLAN
MSA	MUNICIPAL SYSTEMS ACT	PGDS	PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY
MSDF	MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK	PGM	PLATINUM GROUP METALS
NATMAP	NATIONAL TRANSPORT MASTER PLAN	PMT	PROJECT MANAGEMENT TEAM
NDP	NATIONAL DEVELOPMENT PLAN	PPP	PUBLIC-PRIVATE PARTNERSHIPS
NEMA	NATIONAL ENVIRONMENTAL MANAGEMENT ACT	PSC	PROJECT STEERING COMMITTEE
NEMPAA	NATIONAL ENVIRONMENTAL MANAGEMENT PROTECTED AREAS ACT	PRASA	PASSENGER RAIL AGENCY OF SOUTH AFRICA
NFA	NATIONAL FORESTS ACT	RDSP	RURAL DEVELOPMENT SECTOR PLAN
NGP	NEW GROWTH PATH	RISDP	REGIONAL INDICATIVE STRATEGIC DEVELOPMENT PLAN
NHR	NATIONAL HERITAGE RESOURCES ACT	RLM	RUSTENBURG LOCAL MUNICIPALITY
NMT	NON-MOTORISED TRANSPORT	SACN	SOUTH AFRICAN CITIES NETWORK
NSAA	NATIONAL SPATIAL ACTION AREAS	SADC	SOUTHERN AFRICAN DEVELOPMENT COMMUNITY
NSDF	NATIONAL SPATIAL DEVELOPMENT FRAMEWORK	SAGC	SOUTH AFRICAN GEOMATICS COUNCIL
NWA	NATIONAL WATER ACT	SDF	SPATIAL DEVELOPMENT FRAMEWORK
NWEIMP	NORTH WEST ENVIRONMENTAL IMPLEMENTATION & MANAGEMENT PLAN	SDG	SUSTAINABLE DEVELOPMENT GOALS
NWPDP	NORTH WEST PROVINCIAL DEVELOPMENT PLAN	SIPs	STRATEGIC INTEGRATED PROJECTS
NWSDF	NORTH WEST SPATIAL DEVELOPMENT FRAMEWORK	SPLUMA	SPATIAL PLANNING AND LAND USE MANAGEMENT
		TLGFA	TRADITIONAL LEADERSHIP AND GOVERNANCE



FRAMEWORK Act

SEA

SOCIO-ECONOMIC ANALYSIS

UNESCO

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND
CULTURAL ORGANISATION

WTW

WATER TREATMENT WORKS

WWTW

WASTE WATER TREATMENT WORKS



1. INTRODUCTION AND BACKGROUND



1.1 INTRODUCTION AND BACKGROUND

The rapid urbanisation and accelerated consumption of resources that began in the mid-20th century highlighted the need for spatial planning to guide the future development of both urban and rural environments through reports and maps. In South Africa, this was previously achieved through Guide Plans, as outlined in the Physical Planning Act, and structure plans, which were informed by the principles of discrimination and separate development. Following the end of apartheid in 1994, the democratic government introduced a new system of spatial planning. As noted by the South African Cities Network (SACN) in 2015, the implementation of the Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013, is designed to promote more effective and efficient planning and land use management.

The Spatial Planning and Land Use Management Act (Act 16 of 2013) (SPLUMA), delivers a framework for spatial planning and land use management in South Africa. The Spatial Development Framework (SDF) can be seen as an indicative plan showing the envisaged spatial forms, direction of growth, micro-spatial plan for the core areas, conservation-worthy areas and nodal areas for the development of infrastructure and social service. The SDF needs to be informed by the vision of the municipal area, the development objectives, as well as

the strategies and outputs identified. According to the SPLUMA (2013), each sphere of government must take responsibility for spatial planning in their jurisdiction. In this regard the local municipality being the sphere of government operating closest to the community will have a direct role to play in spatial planning on which all decisions on land development should be based. The Spatial Planning and Land Use Management Act, 2013 (SPLUMA) stipulates the role of a local municipality relating to spatial planning and land use management on the following elements:

- ❖ The compilation, approval and review of integrated development plans,
- ❖ The compilation, approval and review of the components of an integrated development plan prescribed by legislation and falling within the competence of a municipality, including a Spatial Development Framework and a Land Use Scheme, and
- ❖ The control and regulation of the use of land within the municipal area where the nature, scale and intensity of the land use does not affect the provincial planning mandate of provincial government or the national interest.

The Spatial Development Framework (SDF) is a core component of a Municipality's economic, sectoral, spatial, social, institutional, and



environmental vision. In other words, it is a tool to achieve the desired spatial form of the Municipality.

The Department of Land Reform and Rural Development (DLRRD) has been tasked to deliver the Bojanala Platinum District Municipality SDF. This district, like many others requires a comprehensive SDF to guide both current and future development within its area. The SDF will provide a strategic framework consisting of a set of objectives, strategies and policy guidelines aimed at directing land use and development options in a way that ensure the realisation of short term and long-term goals.

1.2. STUDY AREA

The Bojanala Platinum District Municipality is a Category C municipality and one of the four district municipalities within the North West Province, South Africa. It is strategically located, bordered by the Waterberg District Municipality to the north, Dr. Kenneth Kaunda District Municipality to the south, the City of Tshwane Metropolitan Municipality to the east, and Ngaka Modiri Molema District Municipality to the west. The BPDM encompasses five local municipalities, namely:

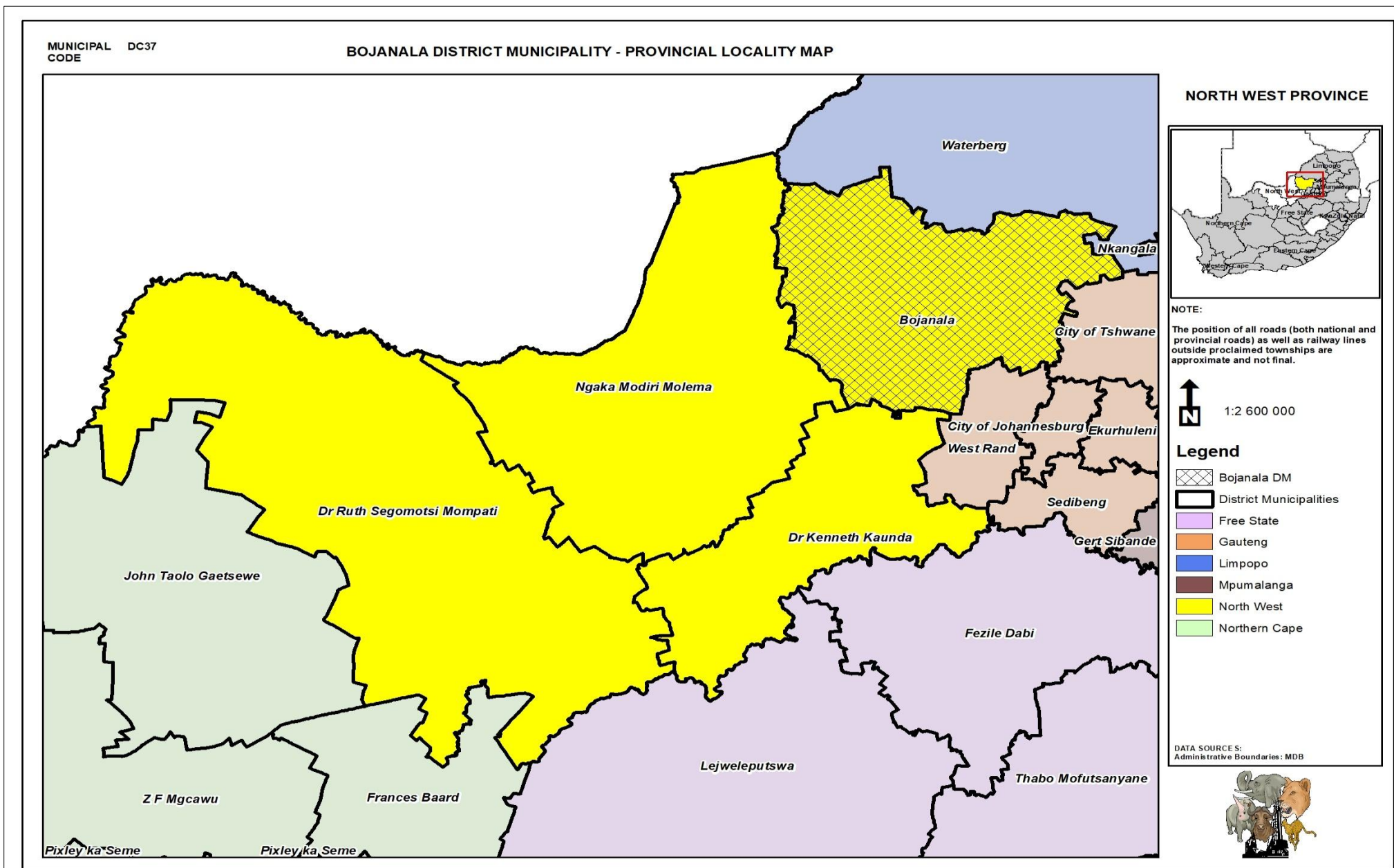
- ✚ Moretele Local Municipality,
- ✚ Kgetlengrivier Local Municipality,

- ✚ Madibeng Local Municipality,
- ✚ Moses Kotane Local Municipality, and
- ✚ Rustenburg Local Municipality.

Located in Rustenburg, at the heart of the platinum mining belt, the district offers significant employment opportunities, particularly within the mining sector. The mining industry is a key driver of the district's economic output, contributing substantially to its Gross Domestic Product (GDP). The district's rich mineral resources and the presence of active mining operations make it an attractive destination for both investors and job seekers, thereby enhancing the region's socio-economic development. The strategic positioning of BPDM, coupled with its mining sector, provides a competitive advantage for local economic growth and development.

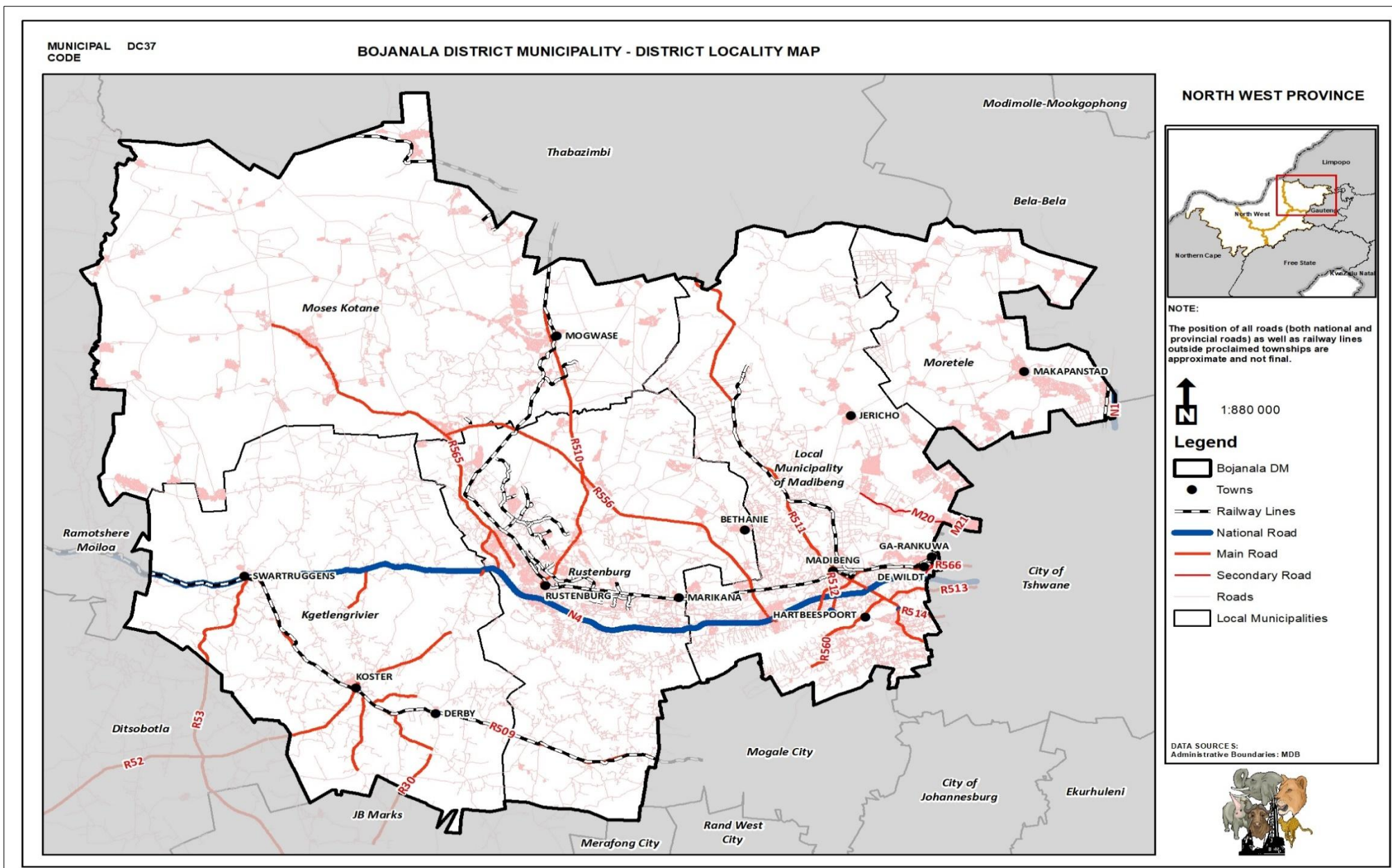


Map 1: Provincial Locality





Map 2: District Locality





1.3. PROJECT AIM AND OBJECTIVES

The **specific aim** of the project is to prepare a Spatial Development Framework in terms of section 12(1) of the Spatial Planning and Land Use Management Act (SPLUMA) Act 16 of 2013.

Objectives include:

- Compliance with the provisions of the Municipal Systems Act, Act 23 of 2000 and the Municipal Planning and Performance Regulations, 2001.
- Compliance with all national legislation governing the spatial planning and management of land in the Republic of South Africa.
- To establish appropriate institutional mechanisms to promote spatial and land use management at Municipal levels including Traditional Councils in line with the provincial sector plans.
- To align the principles of SPLUMA (as stipulated under Section 7 of the SPLUMA)
- To fulfil the requirements for the development of a MSDF (as Stipulated under Part E of the SPLUMA).
- To present a common spatial agenda for development in the district.

- Promote integrated development among stakeholders (spatial governance).
- To promote Sustainable Development in the district.
- To provide updated spatial and demographic data that reflects the current status quo of the district.

1.4. PROJECT METHODOLOGY

The approach and methodology followed in conducting the study is depicted in Table 1 below. The project is to be conducted five incremental phases.

Table 1: Project Approach

PHASE	DELIVERABLES	TIMEFRAME
Phase 0: Preparatory	<ul style="list-style-type: none">❖ Inception Report.❖ Inception meeting.❖ Service Level Agreement.	1 MONTH
Phase 1: Policy Context and Vision Directives	<ul style="list-style-type: none">❖ Legislative and Policy Synthesis.❖ Vision Statement.❖ Stakeholder Engagement – Identify interested & affected parties, notice in Gazette and media, setting up PSC with 1st Project Steering Committee (PSC) meeting.	2 MONTHS
Phase 2: Spatial Challenges and Opportunities	<ul style="list-style-type: none">❖ Summary of Sector Plans.❖ Documentation and mapping of biophysical, socio-economic and built environment spatial challenges and opportunities.❖ Stakeholder engagement – focus groups, public open house, 1st and 2nd PMT meeting, 2nd Project Steering Committee (PSC) meeting.❖ Monitoring and Evaluation.	3 MONTHS



Phase 3: Spatial Proposals	<ul style="list-style-type: none"> ❖ Spatial concept diagram and supportive text. ❖ Final vision statement. ❖ Spatial strategies maps and supporting text. ❖ Draft BPDMSDF report and maps. ❖ Provincial gazette and advertisement of draft BPDMSDF for public comments. ❖ Stakeholder engagement – 3rd PMT meeting, 3rd PSC meeting, advertisement of draft BPDMSDF. 	2 MONTHS
Phase 4: Implementation Framework	<ul style="list-style-type: none"> ❖ Draft set policies. ❖ Draft set of guidelines. ❖ Draft Capital investment framework. ❖ Draft implementation framework. ❖ Stakeholder engagement – Public open house, 4th PMT meeting. 	2 MONTHS
Phase 5: Final BPDMSDF	<ul style="list-style-type: none"> ❖ BPDMSDF final report, executive summary, brochures, pamphlets or posters. ❖ Sector plan alignment proposals and discussions. ❖ Identified and delineated local plans/precinct plans. ❖ IDP and SDF alignment proposals and discussions. ❖ Stakeholder's engagement – 4th PSC Meeting, notice of adoption in Gazette. 	2 MONTHS



2. POLICY CONTEXT & VISION



2. POLICY CONTEXT & VISION

Spatial Development Frameworks within the South African cities and rural areas are guided by a series of National, Provincial and Governmental legislations and policies, together with international policies. The aim of these governmental mandates is to redress the spatial imbalances created by the previous apartheid regime. The South African policies and legislations seeks to advance the promotion economic growth and development, adequate service delivery, to increase sustainability and efficiency while protecting valuable resources and generally improving the livelihood of South Africa citizens. This section details the relevant legislation and policies, which directly influences the preparation of the Bojanala Platinum District Municipality Spatial Development Frameworks.

2.1 NATIONAL LEGISLATIVE & POLICY CONTEXT

2.1.1 The Constitution of the Republic of South Africa, NO. 108 of 1996

The Constitution of the Republic of South Africa is highly relevant to the Spatial Development Framework (SDF) as it establishes the principles of spatial justice, citizens' rights to access land and resources, and the promotion of equitable development. The SDF, which guides land-use planning and development in a sustainable manner, must

align with constitutional mandates related to participatory governance, human settlements, and environmental protection. It serves to ensure that spatial planning contributes to the redress of past injustices, fosters inclusive growth, and adheres to the constitutional values of equality and human dignity.

Implications on the BPDM SDF: Right to Land and Housing: Section 26 of the Constitution emphasizes the right to access land and housing, which informs DSDF's approach to allocating land for development, addressing informal settlements, and promoting affordable housing. Equitable Distribution of Benefits and Opportunities: Section 26 also stipulates that the state must take "reasonable legislative and other measures, within its available resources, to achieve the progressive realization of this right." The DSDF must ensure that the benefits and opportunities of spatial development are equitably distributed, particularly to disadvantaged communities. Environmental Justice: Section 24 of the Constitution enshrines the right to an environment that is not harmful to health or well-being. The DSDF must balance economic growth with environmental protection and sustainable development practices. Social Inclusivity: Section 9 of the Constitution prohibits unfair discrimination, ensuring that the DSDF promotes social inclusivity and accessibility in spatial planning,



particularly for marginalized communities. **Participatory Governance:** The Constitution requires the involvement of citizens, traditional leaders, and local governments in the planning process, which is reflected in the DSDF's emphasis on stakeholder engagement and public participation. **Redress and Reconciliation:** The DSDF must address historical injustices and promote reconciliation by incorporating elements of spatial justice, such as land restitution, into its planning process. By embracing these constitutional principles, the DSDF can ensure that spatial development contributes to social cohesion, human dignity, and the well-being of all South Africans, particularly those who have been historically marginalized or disadvantaged.

2.1.2 The Municipal Systems Act (MSA), Act 32 of 2000

The Local Government Municipal Systems Act (MSA), Act 32 of 2000, originally introduced the Municipal Spatial Development Framework (MSDF) as an integral part of the compulsory Integrated Development Plan (IDP) adopted by each municipality. It's important to closely examine the MSA provisions related to MSDFs in conjunction with relevant sections, particularly Part E, of SPLUMA. While the MSA sets out the fundamental aspects of the MSDF, SPLUMA provides more intricate details. Notably, Chapter 5 of the MSA focuses on integrated development planning, offering the legislative framework for

municipalities to compile and adopt IDPs. Section 26(e) within this chapter specifically mandates the inclusion of an SDF as a mandatory component of the municipal IDP. Consequently, the remaining provisions of the chapter related to IDPs are applicable to SDFs as well. Additionally, in 2001, the Minister for Provincial and Local Government issued the Local Government: Municipal Planning and Performance Management Regulations. Within these regulations, Regulation 2(4) outlines the minimum requirements for a MSDF.

Implications on the BPDMSDF: Section 25(1) of the MSA specifies that municipalities are required to adopt an Integrated Development Plan (IDP), which serves as a comprehensive strategic framework for the municipality's development, guiding all decisions and allocation of resources. Section 26(e) of the MSA stipulates that the IDP must incorporate a SDF as a key element, and the SDF must include essential guidelines for a land use management system within the municipality. Phase 3 of the development of the BPDMSDF will be impacted by Section 21 of the MSA.

2.1.3 National Environmental Management Act (NEMA), Act 107 of 1998

South Africa boasts a lengthy history of methodical biodiversity



planning deeply ingrained in both policy and practical application. The foundational legislative framework governing biodiversity management, protection, and conservation includes the National Environmental Management Act (NEMA), the Protected Areas Act, and the Biodiversity Act. Additionally, beyond national legislation, several of South Africa's nine provinces have developed their own provincial biodiversity laws, given that nature conservation is a concurrent responsibility of both national and provincial governments as stipulated by the Constitution. SPLUMA mandates that the SDF include, among its components, a system ensuring compliance with any environmental legislation enacted by the government.

Its broad objective is to facilitate cooperative environmental governance by setting principles for decision-making on matters impacting the environment, establishing institutions to promote cooperative governance, outlining procedures for coordinating environmental functions among state organs, and addressing certain aspects of the administration and enforcement of other environmental management laws. NEMA assumes critical significance in addressing issues of environmental sustainability, climate change resilience, and prudent utilisation of the natural resource base, all of which are pivotal for the current and future socio-economic well-being of municipal residents.

Implications on the BPDMSDF: In accordance with NEMA, the BPDMSDF is mandated to develop both rural and urban spaces that foster economic opportunities and create conducive environments, while also ensuring the sustainable use of natural resources. Section 2 sets forth the principles of environmental management, stipulating that the BPDMSDF must integrate environmental considerations into spatial planning. Section 11 advocates for aligning the SDF with relevant environmental management frameworks. The SDF is required to include Strategic Environmental Assessments (SEAs) where appropriate, and prioritize areas of environmental importance. Section 2(4)(f) underscores the importance of public participation, ensuring environmental justice within spatial planning processes. Additionally, the SDF plays a crucial role in monitoring compliance with environmental regulations, ensuring that development aligns with the National Environmental Management Act (NEMA)'s objectives of promoting sustainable and equitable land use.

2.1.4 Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013

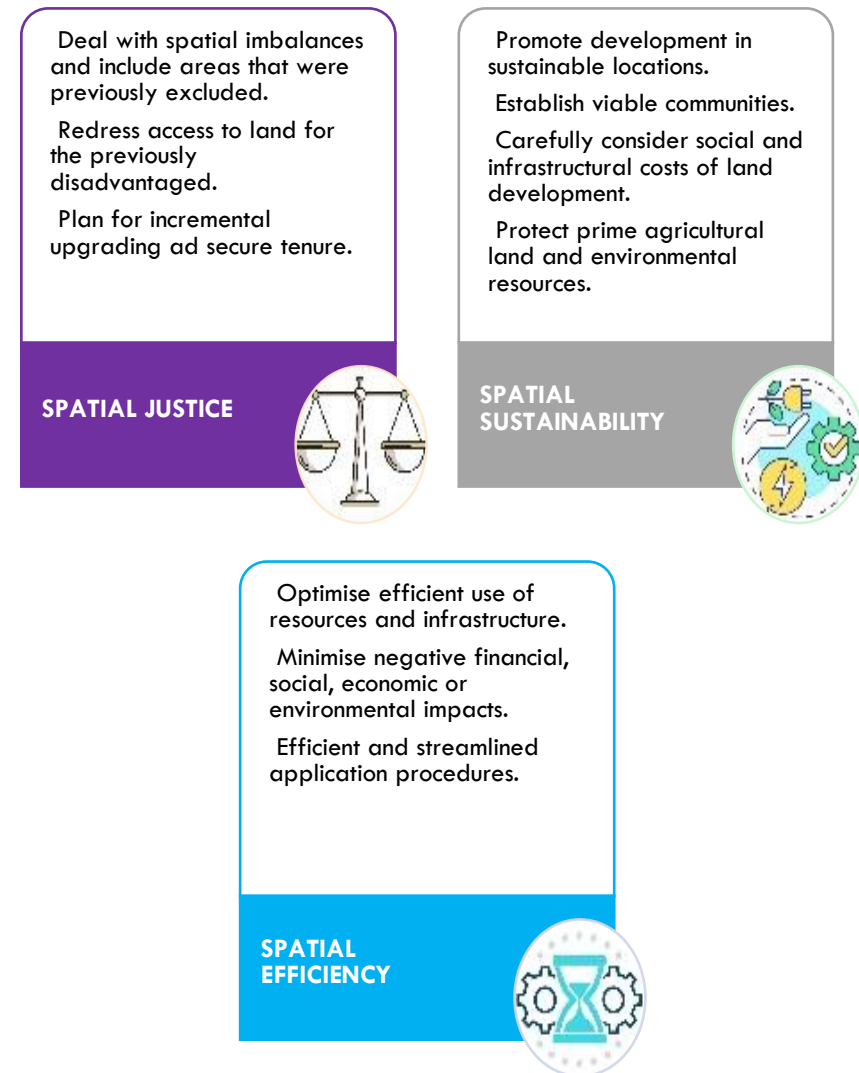
SPLUMA, enacted in 2013, stands as a pivotal piece of legislation governing spatial planning and land use management in the country. This legislation delineates guiding principles, norms, standards, and



procedures essential for effective spatial planning and land use management. Officially promulgated as an Act in August 2013, SPLUMA serves as a comprehensive framework for spatial planning and land use management. It's worth noting that, although the Act has been promulgated, its regulations are yet to be fully complemented, even though the fundamental principles have been established. In terms of Section 5 (1) of Chapter 1 identifies three (3) categories of spatial planning, which in turn identifies three components of municipal planning in particular:

- ❖ Integrated Development Planning,
 - ❖ Spatial Development Planning and Land Use Schemes, and
- Control and regulation of the use of land. In addition, Chapter 2, Section 7 deals with the development principles for spatial planning, land development and land use, which include the following:

Figure 1: SPLUMA Development Principles





Flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

SPATIAL RESILIENCE



Integrated approach to land use and land development.
Free-flow of information, plans and policies between and within tiers of government.
Empowering citizens.

GOOD ADMINISTRATION



Section 12 of Chapter 4 of SPLUMA sets out general provisions which are applicable to the preparation of all scales of SDF's. These provisions require that all SDFs must:

- a) Interpret and represent the spatial development vision of the responsible sphere of government and competent authority,
- b) Be informed by a long-term spatial development vision,
- c) Represent the integration and trade-off of all relevant sector policies and plans,

Guide planning and development decisions across all sectors of government, decision or exercising any discretion in terms of

this Act or any other law relating to spatial planning and land use management systems,

- d) Contribute to a coherent, planned approach to spatial development in the national, provincial and municipal spheres,
- e) Provide clear and accessible information to the public and private sector and provide direction for investment purposes,
- f) Include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere,
- g) Address historical spatial imbalances in development,
- h) Identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks,
- i) Provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors and indicate priority areas for investment in land development,
- j) Promote a rational and predictable land development environment to create trust and stimulate investment,



- k) Take cognisance of any environmental management instrument adopted by the relevant environmental management authority,
- l) Give effect to national legislation and policies on mineral resources and sustainable utilisation and protection of agricultural resources, and
- m) Consider and, where necessary, incorporate the outcomes of substantial public engagement, including direct participation in the process through public meetings, public exhibitions, public debates and discourses in the media and any other forum or mechanisms that promote such direct involvement.

Implications on the BPDMSDF: The BPDM is obligated to fulfil its responsibilities as outlined in the Constitution, the MSA, and SPLUMA through the development of the SDF. Section 7 of SPLUMA mandates that the SDF include development principles that guide spatial development and promote a high quality of life for the district, playing a pivotal role in the development of the spatial proposals. Section 12 outlines the procedures that the BPDM must follow in preparing the SDF, ensuring that Phase 0 of the SDF is developed in accordance with these guidelines and complies with all requirements. Sections 20 and 21 provide further direction on

the preparation and content of the SDF, ensuring proper policy alignment to avoid any conflicts or poor adherence.

2.1.5 Agenda 2063: The Africa We Want

Agenda 2063: The Africa We Want Agenda 2063 (African Union, 2015) is a strategic framework that aims to contribute towards socioeconomic transformation within Africa. It further seeks to accelerate the implementation of past and existing continental initiatives for growth and sustainable development aligning it to the SDG's. Agenda 2063 sets the following action actions:

- Eradicate poverty in the coming decades.
- Provide opportunities for all Africans to have decent and affordable housing in clean, secure, and well-planned environments.
- Catalyse education and skills revolution and actively promote science, technology, research, and innovation, to build knowledge, human capital, capabilities, and skills to drive innovations and for the African century.
- Transform, grow, and industrialise our economies through beneficiation and value addition of natural resources.
- Consolidate the modernisation of African agriculture and agri-businesses.



- Act with a sense of urgency on climate change and the environment.
- Connect Africa through world-class infrastructure.
- Fast-track the establishment of the Continental Free Trade Area.
- Support young people as drivers of Africa's renaissance.
- Silence the guns by 2020, through enhanced dialogue-centred conflict prevention and resolution.
- Achieve gender parity in public and private institutions.
- Introduce an African Passport by 2018.
- Consolidate a democratic and people-centred Africa.

Implications on the BPDMSDF: Agenda 2063, "The Africa We Want," guides that the BPDMSDF should aim to guide eradication of poverty, sustainably play a key ensuring climate change is well looked at, infrastructure development guidelines and projects to enhance the infrastructure in the district, smoother intra-Africa trade with the presence of SADC plans and youth empowerment with spatial visions and projects that guide an inclusive society.

2.1.6 Sustainable Development Goals (SDG's)

The United Nations Sustainable Development Goals in the Figure 2 below require the mobilisation of efforts to end all forms of poverty

through sustainable economic growth, fight inequality in a range of social needs including education, health, social protection and employment opportunities and tackle climate change and ensure environmental protection. The SDGs give further impetus to the Millennium Development Goals (MDGs) with the aim to end all forms of poverty. The SDGs recognise that ending poverty must coincide with strategies that:

- Provide economic growth,
- Address a range of social needs including education, health, social protection and employment opportunities.
- Tackle climate change and environmental protection.

Figure 2: SDG Goals





2.1.7 The Southern African Development Community (SADC)

SADC has a membership of 15 Member States, namely Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe. The following aspects have a direct influence on development in South Africa:

-  **SADC - Regional Indicative Strategic Development Plan (RISDP), 2020-2030** The RISDP is a 10-year regional integration development framework, setting the priorities, policies and strategies for achieving the long-term goals of the Southern African Development Community. It is intended to guide Member States, SADC Institutions, regional stakeholders, and International Cooperating Partners in the process of deepening integration to turn the Community's Vision into a reality. The main intervention areas were selected according to their potential contribution to:
- Poverty eradication.
 - Regional development integration.
 - Regionally balanced and equitable development.
 - Integration into the continental and global economies.
 - Sustainable development and Gender equality.

2.1.8 The Inter-Governmental Relations Framework Act, Act 13 of 2005

According to the Act, its objective is:

- To provide within the principles of co-operative government as set out in Chapter 3 of the Constitution a framework for the national government, provincial governments and local governments, and all organs of state within those governments,
- To promote and facilitate co-ordination in the implementation of policy and legislation, with regard to: coherent government; effective provision of services; monitoring implementation of policy and legislation; and realisation of national priorities, and
- To provide for mechanisms and procedures that assist in the facilitation the settlement of intergovernmental disputes and other matters connected therewith.

The development of the BPDMSDF must ensure co-ordinate interventions of various role players in line with development vision of the BPDMSDF by playing a co-ordinating and integrating role among different sectors within government as well as between the public and private sectors. This in effect means that the public participation process should be central to the development of the BPDMSDF. There



is also a need for monitoring and evaluation of the implementation of the SDF's programmes and projects as well as its policies and legislation and provision should be made to ensure effective intergovernmental conflicts resolution.

Implications on the BPDMSDF: Section 3 of the Act requires the SDF to align with national and provincial spatial plans, ensuring consistency across all levels of government. Section 4 encourages coherent governance, meaning the SDF must reflect input from various governmental stakeholders for integrated development. Additionally, Section 5 outlines how the promotion of the Act can be ensured through. The BPDMSDF & Project managers are now tasked with ensuring a well-run intergovernmental process, whereby during the phase 0 of the SDF development, the proposed or identified PSC member are notified and provided appointment letters to serve on the PSC.

2.1.9 Promotion of Administrative Justice Act, Act 3 of 2000

This Act gives effect to Section 33 of the Constitution (Just Administrative Action). It intends changing the way Government interacts with the people it serves as it ensures that decisions that affect the public must be taken in a way that is procedurally fair. The Act seeks to protect the public from unlawful, unreasonable, and procedurally unfair administrative decisions and gives people

affected by administrative decisions the right to request reasons for administrative actions and decisions and to have such actions reviewed in a court of law. Among the gaps in this Act is that there are situations where officials do not inform citizens of their right to some administrative decisions that are taken by them, and nothing is done to them. Also, awareness-raising activities often do not create awareness of the need to provide reasons for decisions. It should also be stressed that while the need for administrative decisions is communicated to be fair, they do not explain what it means in practice.

Implications of on the BPDMSDF: Section 3 of PAJA mandates that affected parties must be given notice and a reasonable opportunity to make representations before any decision is made, ensuring public participation in the development of the SDF. This ensures that during the phase 0, the act guides that the public be provided a platform to bring forth comments on the SDF. Furthermore, Section 6 provides mechanisms for challenging administrative decisions, enabling stakeholders to seek judicial review if the SDF or its implementation process is found to be procedurally unfair or unreasonable. The Act ensures that spatial planning is conducted with due regard for rights, promoting greater accountability and legitimacy in the planning process.



2.1.10 The National Development Plan, 2030

The National Development Plan 2030 (NDP), crafted by the National Planning Commission and adopted in 2012, serves as a strategic framework directing the country's development imperatives. Supported by the New Growth Path (NGP) and other national strategies, the NDP fundamentally envisions the government's role as an enabler, creating conditions, opportunities, and capabilities conducive to sustainable and inclusive economic growth. It is understood that government sees the NDP as representing the platform for building cooperation and collaborative partnerships between different sectors of society so as to encourage faster economic growth that is more inclusive in nature and the document has explicitly been referenced by the National Treasury as forming the pillar of its economic policies going forward.

Over the course of its 15 chapters, the NDP sets out its basic objectives and proposed actions in relation to a wide range of fundamental development challenges, from developing the country's economy and increasing employment to fighting corruption and achieving nation building and social cohesion. For the purposes of the Bojanala Platinum DM, key policy direction is provided across the span of the document but, in regard to spatial development, the NDP applies most directly in chapter 8 of the NDP, which deals with transforming human

settlement and the national space economy. Recommendations include upgrading all informal settlements on suitable, well-located land, increasing urban densities to support public transport and reduce sprawl, promoting mixed housing strategies and compact urban development near services and livelihood opportunities, and investing in public transport infrastructure, especially commuter rail, for more affordable, safe, reliable, and coordinated public transport.

Chapter 5 of the NDP focuses on environmental sustainability and resilience through an equitable transition to a low-carbon economy, which will also have implications on the way the spatial planning and development in South Africa is approached. Chapter 6 sets out specific targets and goals towards establishing a more inclusive rural economy through integrated rural development. The focus here is on increased investment in new agricultural technologies, research, and the development of adaptation strategies for the protection of rural livelihoods and expansion of commercial agriculture.



Figure 3: NDP Chapter 8

Transforming human settlement and the national space economy

KEY POINTS

- Respond systematically, to entrenched spatial patterns across all geographic scales that exacerbate social inequality and economic inefficiency.
- In addressing these patterns we must take account of the unique needs and potentials of different rural and urban areas in the context of emerging development corridors in the southern African subregion.
- The state will review its housing policies to better realise constitutional housing rights, ensure that the delivery of housing is to be used to restructure towns and cities and strengthen the livelihood prospects of households.

- Active citizenship in the field of spatial development will be supported and incentivised through a range of interventions including properly funded, citizen-led neighbourhood vision and planning processes and the introduction of social compacts from neighbourhood to city level.
- Planning in South Africa will be guided by a set of normative principles to create spaces that are liveable, equitable, sustainable, resilient and efficient, and support economic opportunities and social cohesion.
- South Africa will develop a national spatial framework and resolve the current deficiencies with the local system of integrated development planning and progressively develop the governance and administrative capability to undertake planning at all scales.

The overarching goal of the NDP is to eliminate poverty and reduce inequality by 2030. This involves harnessing the nation's collective energies, fostering an inclusive economy, building capabilities, enhancing state capacity, and fostering leadership and partnerships throughout society. Despite years of democracy, South Africa grapples with significant inequality, poverty, subpar education quality for many, the persistence of apartheid's spatial divide, and challenges faced by the youth. The NDP recognises that addressing these issues requires a transformative shift in the country's performance. The twelve National Outcomes, derived from the NDP, serve as benchmarks against which all development forecasts, visions, and projections are measured. All government and government funded developmental policy and projects should be measured against the following outcomes:



Improve the quality of basic education

Improve quality of teaching & learning.
Improve early childhood development.
A credible outcomes-focused accountability system.

Improve health & life expectancy

Increase life expectancy to 58 for males & 60 for females.
Reduce maternal & child mortality rates to 30-40 per 1 000 births.
Strengthen health services effectiveness.

An efficient, competitive & responsive economic infrastructure network

Reliable generation, distribution & transmission of energy.
Maintain & expand road & rail network.
Maintain bulk water infrastructure & ensure water supply.

A skilled & capable workforce to support inclusive growth

A credible planning institutional mechanism.
Increase access to intermediate & higher-level learning programmes.
Research, development & innovation in human capital.

Decent employment through inclusive economic growth

Faster & sustainable inclusive growth.
More labour-absorbing growth strategy to reduce youth unemployment.
Improve support to small business & cooperatives.

All people in South Africa protected & feel safe

Reduce overall level of crime.
An effective & integrated criminal justice system.
Improve investor perceptions & trust Effective & integrated border management.

Vibrant, equitable & sustainable rural communities & food security

Sustainable agrarian reform & improves access to markets for small farmers.
Improve rural employment opportunities.
Enable institutional environment for sustainable

Sustainable human settlements & improve quality of household live

Accelerate housing delivery.
Improve property market.
More efficient land utilisation & release of state-owned land.

A responsive, accountable, effective & efficient local government system

Community work programme support for human settlements.
Refine ward committee model to deepen democracy.
Improve municipal financial administrative capability.

Protection and enhancement of environmental aspects and natural resources

Enhance quality & quantity of water resources.
Reduce greenhouse gas emissions.
Sustainable environment.

A better South Africa, a better & safer Africa & world

Enhance the African agenda & sustainable development.
Enhance regional integration.
Reform global governance institutions.

A development orientated public services & inclusive citizenship

Improve government performance.
Government-wide performance monitoring & evaluation.
Conduct comprehensive expenditure review.

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



2.1.11 The National Forests Act (NFA), Act 84 of 1998

The exclusive mandate of the Act is to promote the sustainable management and development of forests as a constitutional obligation of the Republic of South Africa. The Act aims to promote the sustainable management and development of forest for the benefit of all, to create the conditions necessary to restructure forestry in State forests, to provide special measures for the protection of certain forests and trees, to promote the sustainable use of forests for environmental, economic, educational, recreational, cultural, health and spiritual purposes, to promote community forests, and to promote greater participation in all aspects of forestry and the forest products industry by persons disadvantaged by unfair discrimination.

Implications on the BPDMSDF: The National Forests Act (NFA), Act 84 of 1998, influences the SDF by requiring the inclusion of protected forest areas in land use planning, ensuring that spatial development does not encroach on these vital ecosystems. Section 4 of the NFA mandates the enforcement of protected forests, which must be reflected in the SDF to prevent degradation. During the phase 2 report, the biophysical environment analysis must fully outline this. The Act promotes sustainable forest management and the SDF must integrate these practices to balance development with conservation.

2.1.12 The National Water Act (NWA), Act 36 of 1998

The purpose of this Act is to ensure that South Africa's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors, meeting the basic human needs of present and future generations, promoting equitable access to water, redressing the results of past racial and gender discrimination, promoting the efficient, sustainable and beneficial use of water in the public interest, facilitating social and economic development, providing for growing demand for water use, protecting aquatic and associated ecosystems and their biological diversity, reducing and preventing pollution and the degradation of water resources, meeting international obligations, promoting dam safety and managing floods and droughts.

Implications on the BPDMSDF: The SDF is guided by Section 19 of NWA to ensure that there is tangible protection of water resources, ensuring that the intensity of the spatial proposals does not negatively affect water quality or availability. Section 21 ensures that SDF must align with designated water use in the district, with section 8 ensuring catchment areas are well noted during phase 2.

2.1.13 The National Heritage Resources Act (NHR), Act 11 of 1999

The Act was introduced as an integrated and interactive system for the



management of the national heritage resources. The National and Provincial Heritage Resources Authority respectively for national and province identifies and manages the protected and heritage areas and then compiles the heritage register after they have categorised accordingly as per the principles prescribed in the Act. Information on any heritage site identified within a local authority, must, within 30 days of a declaration by the heritage resources authority, be communicated to the affected local authority. The act is supported by the Spatial Planning and Land Use Management Act, requires a municipality to make provision in the land use scheme and spatial plans for the protected areas, for the heritage registers and heritage areas. It is also required that all buildings that are older than sixty-year need approval of the Heritage Council prior to either their demolition of a building or the approval by the municipality of building plans for their alteration.

Implications on the BPDMSDF: The NHR requires that the SDF seek to ensure the identification and protection of heritage sites. Section 27 of the Act mandates the protection of significant cultural, historical, and archaeological sites, and the SDF must ensure that land use planning does not negatively affect these heritage resources. The Act also requires that municipalities consider the impact of development on heritage sites and promote their

conservation, which must be reflected in the SDF through zoning and land use restrictions. Additionally, Section 38 of the NHR requires assessments for developments that may affect heritage sites, and the SDF must guide development in ways that comply with these requirements.

2.1.14 The Traditional Leadership and Governance Framework Act (TLGFA), Act 2 of 2019

The Traditional Leadership and Governance Framework Amendment Act 2 of 2019, calls for the participation of Traditional Councils in the development of municipal policies that affect communities located in areas administered by traditional leaders. The Act states that the functions of a local House of Traditional Leaders are to advise the district/local municipality in question, on the development of planning frameworks that impact on traditional communities and to participate in local programmes that have the development of communities as an objective. The proposed BPDMSDF will cover areas under the administration of Traditional Councils and the affected communities will form an integral part of the compilation of the SDF.

2.1.15 National Transport Master Plan 2005-2050

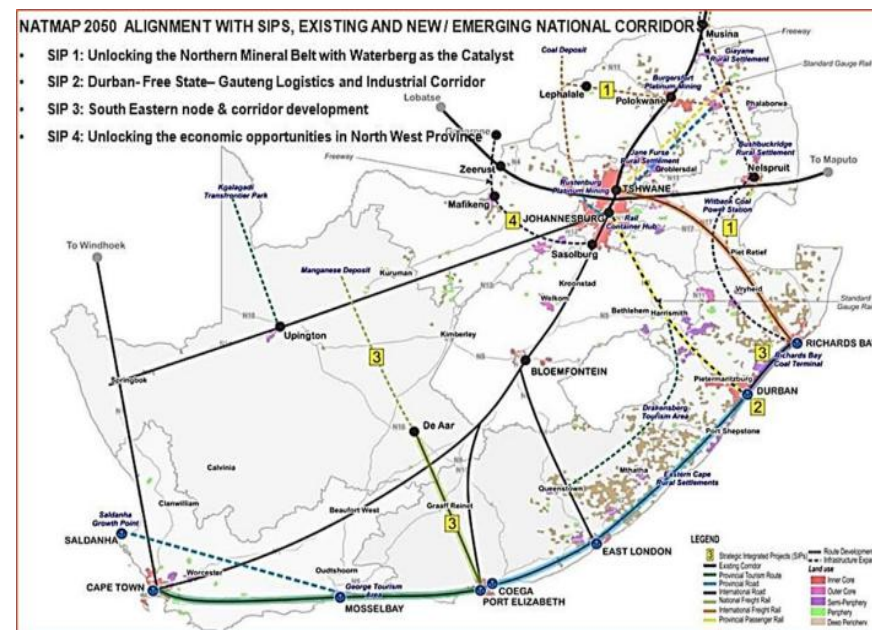
The purpose of the National Transport Master Plan 2005-2050 is to motivate a prioritised programme for interventions to upgrade the



transportation system in South Africa. The core directs or paradigm shifts emanating from the Master Plan are to:

- ❖ Place greater emphasis on developing rail as a transportation medium,
- ❖ Ensure greater integration between land use development and transportation planning,
- ❖ Put more emphasis on enhancing development of a number of priority national transport corridors, and
- ❖ Responsive to growing passenger and freight customer needs
- ❖ Supportive of an inclusive spatial vision
- ❖ Supports economic competitiveness through seamless multi-modal trade corridors
- ❖ Promotes a healthy lifestyle and supports social inclusion
- ❖ Managed by strong institutions

Figure 4: NATMAP 2050 Alignment with SIPS



2.1.16 Infrastructure Development Act (IDA), Act 23 of 2014

The Act is administered by the National Ministry of Economic Development and aims to direct infrastructure development initiatives in the Republic of South Africa. The Act intends to provide for the facilitation and coordination of public infrastructure development which is of significant economic or social importance to the Republic, ensure that infrastructure development in the Republic is given priority in planning, approval and implementation, ensure that the development goals of the State are promoted through infrastructure



development, improve the management of such infrastructure during all lifecycle phases, including planning, approval, implementation and operations, and to provide for matters incidental thereto. There are regions within the Bojanala Platinum District Municipality that have lower infrastructure due to its rural nature, this legislation is vital to putting measures in place to encourage investment in infrastructure and the maintenance thereof.

Implications on the BPDMSDF: Section 2 provides the objectives which will require the SDF to adhere to the identification and implementation of strategic integrated projects which are of significant economic or social importance to the Republic (alignment with the NSDF, 2022 & NATMAP, 2050) which will give effect to the national infrastructure plan. This entails that the SDF will need to provide an implementation framework in phase 4 that will give effect to this.

2.1.17 Agricultural & Agro-Processing Master Plan, 2022

The Agriculture and Agro-Processing Master Plan (AAMP) is the product of a social compact between labour, government, civil society, and industry. It aims to promote inclusive growth, competitiveness, transformation, employment, and food security (AAMP, 2022). The government launched the AAMP as a means of social compacting to tackle the structural impediments hindering inclusive growth in the

sector. The overarching vision of the AAMP is to develop an agriculture and agro-processing sector that is not only inclusive, but also competitive, job-generating, sustainable, and on a growth trajectory. This vision aligns seamlessly with the goals outlined in chapter six of the National Development Plan (NDP), emphasising the importance of fostering an inclusive and thriving agricultural and rural economy. In 2012, the NDP introduced a three-tier growth strategy, identifying agriculture as holding the most significant potential for growth:

- ❖ Under-utilised farming areas in former homeland areas and land reform projects,
- ❖ Expansion of export-driven high-value crops and investment in integrated value chains, and
- ❖ Growing the agro-processing industry to promote transformation for inclusive growth, transformation, and job creation.

In support of the vision for agriculture and agro-processing, the core focus for the AAMP can be drafted as follows:

- ❖ Increase food security in South Africa,
- ❖ Promote sustainable transformation in the agriculture and agro-processing sectors,
- ❖ Improve access to local and export markets, which will require



constant upgrades in the quality of supply to bolster South Africa's competitiveness,

- ❖ Enhance competitiveness and entrepreneurship opportunities through technological innovation, infrastructure construction and digitalisation,
- ❖ Create an effective farmer support system and agro-processing incentives,
- ❖ Create decent, growing and inclusive employment, in addition to improving working conditions and fair wages in the sector,
- ❖ Improve the safety of the farming community and reduce stock and crop thefts and farm attacks,
- ❖ Create a capable state and enabling policy environment, and
- ❖ Enhance resilience to the effects of climate change and promote sustainable management of natural resources and principles of just energy transition.

The AAMP functions as a strategic growth plan for the sector, outlining a range of short and medium-term measures essential for fostering inclusive growth and sustainable job creation within agriculture and rural economies. The Master Plan outlines recommendations aimed at addressing policy constraints, infrastructure issues, market shortages, and structural weaknesses that contribute to inefficiencies and hinder transformation in agricultural and food value chains. The interventions

and reforms specified in the Master Plan can be categorised into six pillars:

- i) Resolving policy ambiguities and creating an investment-friendly environment.
- ii) Investing in, and maintaining enabling infrastructure critical to industry, such as electricity, roads, rail and ports.
- iii) Providing comprehensive farmer assistance, development finance, R&D and extension services.
- iv) Improving food security, increasing production and employment and ensuring decency and inclusivity.
- v) Facilitating market expansion, improving market access, and promoting trade.
- vi) Improving localised food production, reducing imports and expanding agro-processing exports.

Implications on the BPDMSDF – The BPDMSDF is set to be aligned with the AAMP, arable land within the District Municipality has large capacity for agricultural potential. The alignment with the proposed Agri-hubs and FPSU's will ensure the set interventions will be in line with development. The AAMP interventions that

apply:

- ❖ **Improve efficiency and partnerships in land acquisition and**



transfer to deserving beneficiaries (in line with DALRRD's beneficiary selection and land allocation policy, 2020),

- ❖ Develop a housing support programme for farmworkers and farming communities,
- ❖ Establishing a Grain & Oilseed Monitoring Committee (Act 36 liaison committee) and enhance the existing liaison structure between the government and the industry for better coordination,
- ❖ Transform and capacitate Water User Associations (WUAs) to effectively manage irrigation scheme DWS, WUAs and revitalisation,
- ❖ Re-establish the Field Crops Value Chain Round Table to implement the Master plan and ensure the successful implementation of the PPP,
- ❖ Establish a livestock round table that includes all stakeholders. This will also assist in the M&E process,
- ❖ Participate in the Liaison Committee on Act 36,
- ❖ Fast track the revitalization of irrigation schemes for increased production and efficient water use, and
- ❖ Enhance biosecurity control measures to reduce disease and pest outbreaks in animals and crops.

2.1.18 National Spatial Development Framework (NSDF), 2022

Zooming into Chapter 8 of the NDP outlines the steps for creating a national spatial development framework. According to Section 5(3)(a) of the Spatial Planning and Land Use Management Act, Act 16 of 2013, the Minister is required to, after consulting with other government entities and the public, compile and publish this framework. Additionally, Sections 13(1) and (2) of the Act mandate the Minister to review the framework at least once every five years. Section 14 of SPLUMA, specifies the content of the NSDF. It emphasises that the framework should coordinate and integrate with the spatial development frameworks of provinces and municipalities. Section 12(1) of the Act further dictates that the NSDF must contribute to a well-planned approach to spatial development across all three levels of government. Section 12(2) (a) specifies that the three levels of government must actively participate in spatial planning processes to ensure coordination, consistency, and harmony in their plans and programs. The NSDF aligns with the transformative goals outlined in the South African Freedom Charter, the RDP and the NDP. It is also guided by the principles of SPLUMA. The foundation for the National SDF consists of five frames as listed below:



Frame One: Urban Regions, Clusters and Development Corridors as the engines of national transformation and economic growth: To focus and sustain national economic growth, drive inclusive economic development and derive maximum transformative benefit from urbanisation and urban living.

Frame Two: Productive Rural Regions and Regional Development Anchors as the foundation of national transformation: To ensure national food security, rural transformation and rural enterprise development and quality of life in rural South Africa through a set of strong urban-rural development anchors in functional regional-rural economies.

Frame Three: National Ecological Infrastructure System as enabler for a shared and sustainable resource foundation: To protect and enable sustainable and just access to water and other national resources for quality livelihoods of current and future generations.

Frame Four: National Connectivity and Economic Infrastructure Networks as enabler for a shared, sustainable and inclusive economy: To develop, expand and maintain a transport, trade and communication network in support of national, regional and local economic development.

Frame Five: National Social Service and Settlement Infrastructure Network in support of national well-being: To ensure effective access to the benefits of high-quality basic, social and economic services in a well-located system of vibrant rural service towns, acting as urban-rural anchors and rural-rural connectors.

National Spatial Action Areas (NSAAs)

Following on from the directive in the NDP, the NSDF identifies areas of significant national risk and potential. In order to create such a 'shared, smaller, better connected and more sustainable South Africa', the NSDF has identified the most urgent short-term, strategic spatial development catalysts to first bring about radical spatial transformation at scale, to manage and mitigate rising national risks, and also to move our country at speed towards the Ideal National Spatial Development Pattern and these are then called National Spatial Action Areas (NSAAs). Concerted, focused and sustained intergovernmental collaboration is required in these NSAAs:

- i. **NSAA One: National Spatial Transformation and Economic Transition Regions**
- ii. **NSAA Two: The Central Innovation Belt**
- iii. **NSAA Three: National Resource Risk Areas.**
- iv. **NSAA Four: National Urban Spatial Transformation and Economic Transition Regions**



v. NSAA Five: The Arid-Innovation Region

NSAAs affecting the BPDM

• NSAA Two – Central Innovation Belt

The Gauteng urban region's Central Innovation Belt is a key economic area facing challenges such as job losses in mining, agricultural pressures, and environmental degradation, especially in water resources. Proposed actions include promoting economic diversification, repurposing industrial land, supporting agriculture and agro-processing, accelerating land reform, and addressing environmental risks. A collaborative government-private sector initiative is needed to manage water and land resources, protect agriculture, and ensure sustainable urban development. The local municipalities within the BPDM are all affected by the Central Innovation Belt outlined by the NSDF, with Rustenburg been identified as a key national urban node within the CIB-NSAA. The CIB-NSAA is spatially positioned to be an economically strong, diverse production area which is an important part of the core economic driver of the country and continent.

Figure 5: Central Innovation Belt



Source: National Spatial Development Framework, 2022

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



BPDM is affected by the Central Innovation Belt identified in the National Spatial Development Framework. Guided by the Ideal National Spatial Development Patterns and the NSDF Sub-Frames, the following proposals are made:

- a) Support large-scale regional economic and employment change in the region through innovation, diversification, adaptation and the repurposing of existing industrial land and associated infrastructure,
- b) Expedite urban and rural land reform, consolidate existing small-and-medium-scale agriculture support programmes, protect and optimise high-value agricultural land, and strengthen the focus on job-intensive agro-processing in the area,
- c) Establish a joint public-private action group to manage the threat to nationally and regionally important water and productive land resources, with the priority being on the impact of formal and informal urban sprawl, acid mine water, the maintenance of productive agriculture, especially for small scale farmers close to urban centres, and the rehabilitation and management of the Vaal system.
- d) Introduce a special collaborative programme in government (including DMR, DTI, CoGTA, DRDLR, DPME, NT, provincial

sector departments and municipalities) with a specific focus on ensuring

- i. innovation and economic diversification, and
- ii. Quality human settlement development in the region, and involve universities, research councils, the private sector, communities and organised labour in this urgent initiative.

- **NSAA Four: National Urban Spatial Transformation and Economic Transition Regions**

Two of the local municipalities under the BPDM (Madibeng and Moretele) are fall under the designated Gauteng NUSTETR. This clustering implies that the Madibeng and Moretele are considered spatially and functionally linked to Gauteng's urban conurbation of Johannesburg, Tshwane, and Ekurhuleni.

The NSDF explicitly designates Madibeng as a Regional Development Anchor within the Gauteng NUSTETR. This label has clear developmental and policy implications:

- It is expected to serve as a secondary economic node that supports and decongests the metro core.
- Madibeng is positioned to absorb urban growth spillovers, offer industrial and logistics development opportunities, and serve as a gateway interface between rural and urban economies.



- The NSDF expects infrastructure upgrades, housing densification, transport integration, and service delivery improvements in these anchor areas to support Gauteng's spatial and economic transformation.

Figure 6: The Gauteng NUSTETR



Source: National Spatial Development Framework, 2022

Implications of the NSAA Four in BPDM

a. Infrastructure Prioritisation

NUSTETRs are prioritised for bulk infrastructure upgrades, particularly:

- Water, sanitation, stormwater, electricity, and transportation networks
- Systems resilience in light of climate change impacts

For Madibeng and Moretele, this could attract national funding, partnerships, or pilot projects.

b. Housing and Land Reform

These areas are encouraged to:

- Enable higher residential densities
- Provide diverse and affordable housing
- Facilitate urban land reform for spatial equity

Madibeng, especially around Brits and the R511 corridor, already shows pressure for urban expansion and would need spatial planning to pre-empt informal growth patterns and guide sustainable settlement.

c. Economic Transition Opportunities

Given the proximity to Gauteng:

- There are opportunities for economic diversification.
- Nodal development for SMEs, service-based industries, agri-processing, and logistics hubs



- Potential to plug into the innovation and youth employment networks envisioned for Gauteng's NUSTETR.

d. Transport and Mobility Integration

Madibeng and Moretele are relevant in the broader discussion of:

- Mass public transport extension
- Mobility corridors linking peripheral townships and rural settlements to Gauteng metros

This could influence future integrated public transport investment, including BRT extensions, rail upgrades, or minibus taxi reform.

Implications on the BPDMSDF: All development within South Africa must be within the parameters set out in the Constitution and the NDP. The NSDF sets out to align itself with the development directives and objectives of the NDP by guiding and directing government expenditure and investment in line with the NDP. The development of the BPDMSDF has to take into consideration the local municipalities structured around the central innovation belt. This will ensure the spatial proposals are aligned with the National vision and makes it easier to unlock the development and tourism potential in those zones.

2.1.19 Mineral and Petroleum Resources Development Act (MPRDA), Act 28 of 2002.

The mining sector is a significant driver of the national and North West provincial economy. The Bojanala Platinum District alone contributes over 20% to the national mining economy. The MPRDA, Act 28 of 2002 ensures sustainable development and responsible exploitation of mineral and petroleum resources, safeguarding the interests of local communities and promoting social and economic growth. In Rustenburg, this act has been instrumental in regulating mining operations, protecting the environment, and addressing social issues related to mining activities. More importantly, the MPRDA sets out specific standards for the use of land surface rights in Section 53 in order to secure the protection of mining and mineral resources.



2.2. PROVINCIAL POLICY CONTEXT

2.2.1 North West Provincial Development Plan (2030)

The Provincial Development Plan (PDP) was developed in alignment with the NDP national vision for 2030. The NDP outlines thirteen key national development priorities, and the PDP focuses on eight of these, specifically tailored to the context of the North West Province. Given the predominantly rural character of the province, special emphasis is placed on addressing the needs of the rural economy. The selected key focus areas in the PDP prioritise the upgrading, provisioning, and maintenance of economic infrastructure. This strategic approach is seen as a crucial prerequisite for overall economic growth and development, with the added benefit of sustaining employment opportunities. The PDP's objectives align with the first five-year plan of economic transformation within the province, aiming to synchronise with the broader national goals outlined in the NDP. The eight NDP development priorities that form the foundation of the province's initial five-year plan for economic transformation include:

- ❖ Economy and employment,
- ❖ Economic infrastructure,
- ❖ An integrated and inclusive rural economy,
- ❖ Human settlement and spatial transformation,
- ❖ Improving education, training and innovation,

- ❖ Building a capable and developmental state,
- ❖ Fighting corruption, and
- ❖ Transforming society and uniting the province.

The PDP emphasises the necessity for spatial restructuring across the province, requiring the identification and pursuit of normative principles and planning priorities. This approach ensures a coordinated effort among relevant implementing agencies at both the local and provincial levels. It is crucial that these planning principles align with those prioritised at the national level, contributing to the transformation of the spatial economy on a national scale. To adhere to the adopted principles and priorities, the PDP underscores the importance of providing strategic guidance for spatial transformation initiatives. This involves the development of strategies and policies, along with conducting research to enable fact-based decision-making. Spatial planning plays a critical role in shaping the future development of the province, and the NDP highlights specific intervention areas for spatial development:

Rural Restructuring Zones

According to the PDP rural structuring zones are characterised by large populations experiencing change, for example, new settlement formation. As highlighted in the PDP, such areas need management, institutional development, land and tenure reform, infrastructure provision and economic stimulus. Rural restructuring zones generally



include the more densely populated parts of the previous homelands, where there is population dynamism and sufficient numbers to provide the basis for viable markets. There may also be areas with agricultural, tourism or mining potential.

Resource Critical Regions

These are regions with competition between development and environment, or between competing environmental land uses. In the North West province, one category of the resource critical regions represents the competing interests between high valued mineral resources the environment, tourism or land claims. With regards to environmental sustainability and biodiversity planning (as discussed in Chapter 8) resource critical regions must incorporate:

- ❖ Critical Biodiversity Areas (CBAs)
- ❖ Ecological Support Areas (ESAs)

Implications on the BPDMSDF: The PDP outlines the long-term vision for the entire country and offers a strategic framework to direct the spatial transformation of the nation. It emphasises the importance of acknowledging the targets and development priorities identified in the NDP, particularly those that have a direct impact on the North West province. Rural restructuring zones provide a framework for aligning areas within the district that exhibit significant potential for tourism, mining, and agriculture

sectors that are notably prominent throughout the district. These zones ensure that the development process is strategically directed. As such, the status quo analysis in Phase 2 and the spatial proposals in Phase 3 must be designed to align with development corridors around these key areas.

2.2.2 North West Provincial Growth & Development Strategy, 2004-2014.

“To build a truly united, non-racial, non-sexist, democratic and prosperous society that is jointly focused to deliver on key priorities aimed at growing a vibrant economy.”

Provincial Growth and Development Strategy (PGDS) is a comprehensive and integrated development plan spanning a period of ten years. It serves as a strategic blueprint that outlines the direction and scope for province-wide development programs and projects. The PGDS is designed within the context of a long-term perspective, taking into account the available resources and constraints. One of the key functions of a PGDS is to provide a spatially referenced framework that guides both public and private sector investments. It highlights areas of opportunity and development priorities, facilitating alignment among different levels of government. Essentially, the PGDS aims to offer strategic guidance to District and Local Municipalities in shaping their more detailed Integrated Development Plans and Spatial



Development Frameworks. It acts as a foundational document that helps coordinate and harmonise development efforts across various levels of governance. The 2004-2014 North West Provincial Growth and Development Strategy (PGDS) serves as a framework for promoting integrated and sustainable growth as well as economic development within the province. According to this strategy, its primary focus is on defining a shared vision, goals, and objectives that outline what should be achieved and how the provincial government, along with its social partners, can attain these objectives.

The PGDS identifies the following goals and objectives for the provinces' sustained growth and economic development:

- ❖ The Economic Goal requires an average economic growth rate of 6.6% per annum, to halve unemployment over ten years. This is considered the minimum economic growth that would create enough capacity and momentum to place the province on a virtuous cycle of integrated and sustainable growth and development.
- ❖ The Poverty Eradication Goal is aimed at wiping out the 'basic needs' backlog following the provisions of the Constitution and to prepare the poor for future growth and development.

The following objectives are intended to facilitate and support the manifestation of the identified goals:

1. Implementing a Public Sector Employment Programme (EPWP),
2. Ensuring cooperative governance and the formation of Public-Private Partnerships (PPP's),
3. Promoting equal and fair access to opportunities and assets,
4. Enhancing competitiveness, profitability and SMME development, and
5. Ensuring sustainable development through resource and environmental management.

Implications on the BPDMSDF: PGDS offers guidance and a comprehensive scope for development programs and projects across the entire province. It establishes a spatially referenced framework that not only influences public sector initiatives but also shapes private sector investments, fostering intergovernmental alignment in the process. The BPDMSDF will need to ensure spatial directive alignment by taking into consideration the economic goal of the province through identification of key projects to support the manifestation of development in the province. The Implementation framework of the SDF will be key in addressing this by proving a Capital Expenditure Framework that guides development across the district.



2.2.3 North West Environmental Implementation and Management Plan, 2020-2025

“Vibrant and Prosperous Society in harmony with our natural resources”

Environmental Implementation- and Management plans are required in terms of Chapter 3 of the National Environmental Management Act (NEMA), Act 107 of 1998. Section 11(1) of chapter 3 of NEMA (as amended) provides that every national department listed in Schedule 1 of NEMA that exercises functions which may affect the environment and every provincial department responsible for environmental affairs must prepare an Environmental Implementation Plan (EIP) within five years of the coming into operation of the National Environmental Management Laws Second Amendment Act, 2013 (Act No 30 of 2013) and at intervals of not more than five years thereafter. The EIP describes Departmental policies, plans and programmes that may impact on the environment and how these will comply with NEMA principles and national environmental norms and standards with the aim of ensuring that government integrates environmental considerations into its core mandate, functions and activities.

The North West Environmental Implementation and Management Plan emphasises that sustainability in the North West Province is aligned to the national framework on sustainability. With various debates that

have emerged on what constitutes sustainability, the sustainability as a ‘nested’ model has been adopted as a theoretical basis for the provincial concept as described in the National Strategy for Sustainable Development Strategy (NSSD). This is mainly because it recognises and expresses the dependencies that exist between society, the economy and the natural environment. It implies that any deterioration of one aspect will result in a concurrent deterioration in the others. The NWEIMP, has identified agriculture as the only sector apart from mining in which the North West is acknowledged to have a comparative advantage over the other provinces. Which is still one of the major activities within the local municipalities under the Bojanala Platinum District Municipality. The agricultural sector produces 13% of provincial GDP and provides jobs for 18% of the labour force in the province. The EIMP identifies the following Economic Pillars of the province:

- ❖ Agriculture,
- ❖ Tourism and
- ❖ Culture.

The NWEIMP provides a framework to ensure that environmental considerations are taken into account at every stage of the life of a project, process or policy. In essence, the EIMP ensures an integration of environmental considerations across the full life cycle of the activity.



It also ensures Integration of knowledge across specialist disciplines. The EIMP ensures the integration of stakeholders through the activity which is essential on of the critical elements in developing an SDF. In a brief, the EIMP is not only used in looking at environmental impacts of a project or development but also looking at the environmental impacts of policies.

Implications on the BPDMSDF: The EIMP has the overarching goal of coordinating and harmonising the environmental policies, plans, programs, and decisions of various departments, especially those with functions that may impact the environment. It is crucial that the Spatial Development Framework aligns with this objective. This alignment becomes imperative to safeguard environmentally sensitive areas within the municipality and to promote sustainable development and eco-tourism. By integrating environmental considerations into the SDF, the municipality can proactively contribute to the protection of sensitive ecosystems and support initiatives that foster long-term ecological sustainability and responsible tourism practices.

2.2.4 North West Spatial Development Framework (NWSDF), 2016

The North West Spatial Development Framework (NWSDF) is one of the fundamental implementation instruments of the PGDS. By identifying priority investment areas and intervention zones, the PSDF seeks to consolidate the spatial structure of the province around, and along key economic activity areas and development corridors. The NWSDF also strives to protect valuable agricultural land and environmentally sensitive areas by delineating sectoral development areas. This NWSDF provides guidelines for operationalising the provincial priorities in the preparation of local SDF's and other development plans. Spatial Objectives of the NWSDF is to identify a number of interrelated strategic development objectives which provide the foundation for the spatial development strategies for the province and support the Spatial Indicative Framework. Ten strategic objectives identified providing Strategic Focus Areas (Areas of Intervention on provincial, district and local level) include:

- **Strategic Objective 1:**

Focus development on regional spatial development initiatives, development corridors, development zones and nodes

- **Strategic Objective 2:**

Protect biodiversity, water and agricultural resources

- **Strategic Objective 3:**



Promote Infrastructure Investment

- **Strategic Objective 4:**

Support economic development and job creation guiding the spatial development pattern of North West

- **Strategic Objective 5:**

Balance urbanisation and the development of rural areas within North West

Spatial Development Elements within North West as identified in the PSDF include:

- ❖ Regional and Intra-Regional Accessibility and Mobility
- ❖ Spatial development pattern
- ❖ Clustering of population and economic concentrations
- ❖ A system of interactive activity nodes
- ❖ Economic and transportation corridor development
- ❖ Existing Nodal Hierarchy, Corridor Focus and Potential Development Nodes
- ❖ Economic Infrastructure
- ❖ Existing Development Pattern



2.3 DISTRICT CONTEXT

2.3.1 Bojanala Platinum District Municipality IDP, 2022/2027

As highlighted in the Bojanala Platinum District Municipality 2022/27

IDP, the long-term development vision for the district reads as follows:

“Bojanala Platinum District Municipality, a model of cooperative governance for effective and efficient service delivery in partnership with local municipalities and all stakeholders”.

The district objectives as set out in the districts 5th Generation IDP are intended to focus municipal capacity towards accelerating service delivery and improving the quality of life of the district's citizens. This IDP document remains focused on ensuring that the district:

- ❖ Promote democratic and accountable local government,
- ❖ Ensure the provision of services to communities in a sustainable manner,
- ❖ Promote social and economic development,
- ❖ Promote a safe and healthy environment, and
- ❖ We encourage the involvement of communities and community organizations in the matters of local government within our district.

District priorities:

- Infrastructure – Water, sanitation, roads, stormwater & electricity.
- Economic Issues - Economic development.
- Development & Planning - Land use planning & housing.
- Social Infrastructure - Community facilities (halls, sports grounds & libraries).
- Financial Management - Financial Management.

Implications on the BPDMSDF: The MSA requires that the IDP have the SDF contained in it. The BPDMSDF will seek to achieve alignment in vision manifestation of the IDP. This will guide the spatial vision of the SDF and also in terms of project development, the SDF will need to provide feasible projects that will ensure the IDP outcome is possible.

2.3.2 Bojanala Platinum District Municipality SDF, 2012

The Bojanala Platinum District Municipality Spatial Development Framework (BPDMSDF) provides broad spatial planning and development directives for the district and subsequently, local municipalities. The district SDF as identified in the district IDP is linked to the land use management system and must be aligned with the local municipalities SDFs. The district does not have an updated SDF as yet and is currently developing its SDF.



2.3.3 Bojanala Platinum District Rural Development Sector Plan, 2023

“To create vibrant, equitable and sustainable rural communities with emphasis on poverty alleviation, environmental protection, and economic development”.

The Bojanala Platinum District Rural Development Sector Plan is meant to complement existing strategic spatial plans located in all three spheres of government and render the needed ‘rural development component’ to the country’s existing intergovernmental and cross-sectoral strategic spatial planning system. The Department of Agriculture, Land Reform and Rural Development’s (DALRRD) strategic objectives are corporate governance and service excellence through compliance within land administration and spatial planning for integrated and sustainable growth and development, among others. A part of this includes creating agricultural value chains, developing agricultural inputs, monitoring agricultural production and consumption, and promoting comprehensive rural development. In the same vein, the DRDP should be viewed as complementing existing district plans, at the same time anchoring rural development objectives as articulated at provincial and national levels of governance. Through the development of functional regions & intervention areas that seek to

assist in ensuring the development potential of the rural space are enhanced.

Implications on the BPDMSDF: The DRDSP contains key zones which are functional regions and the SDF will be required to Bring forth spatial proposals that align with the set functional regions to ensure that full advantage of the potential of the local municipalities is accomplished.

2.3.4 Bojanala Environmental Management Framework, 2018

Section 24 of the Constitution stipulates that all South Africans have a right to an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of present and future generations. The Constitution compels everybody to take reasonable steps to prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources. The SPLUMA requires the development of municipal SDFs that must include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities and high potential agricultural land where applicable.

In an effort to acknowledge the importance of the BPDMSDF, as an important policy with regards to protecting the environment, which if



not protected, will be harmful to the health and wellbeing of its citizen and natural resources within the district. Bojanala Platinum District Municipality EMF is a decision support tool, which ensures that the competent authority has sufficient information to guide EIA authorisation decisions within a specific geographical area. It functions as support mechanism in the EIA process in the evaluation and review of development applications, as well as in decision making. Although the legal mandate for EMFs is vested with the EIA authorities and not directly with the local municipality responsible for land use management in municipal areas, the SPLUMA requires SDFs to take cognisance of any environmental management instrument adopted by the relevant environmental management authority.

Implications on the BPDMSDF: The BEMF aligns with NEMA to ensure environmental management is accomplished across board. Utilising the BEMF will provide the SDF sustainability in all developments located within the local municipality. This will ensure cohesion with developments spread out in the nodal points of the district. The BEMF is strategically aligned with the NEMA to facilitate comprehensive environmental management across all domains. Incorporating the BEMF into the BPDMSDF is a pivotal strategy for ensuring sustainability in all developments within the municipality. By doing so, the municipality ensures that

environmental considerations are seamlessly integrated into its developmental initiatives, promoting environmentally responsible practices. This will guide how protected areas within the district are catered for and to ensure heavily how the spatial proposals will have to take into incorporation these zones and provide feasible development around them.

2.3.5 The Integrated Rural Development Sector Strategy, 2023

The Integrated Rural Development Sector Strategy (IRDSS) aims to realise a vision of socially cohesive and stable rural communities with viable institutions, sustainable economies, and universal access to social amenities. This strategy is specifically designed to address the challenges faced by rural areas in South Africa, such as poverty, inequality, and lack of access to natural resources. These challenges are mainly underpinned by the historical and political context of the pre-1994 era. After the transition to democracy in 1994, the main challenge for rural development was to end the marginalisation of the rural poor. The objectives of the Integrated Rural Development Sector Strategy are to:

- (a) Provide a guiding framework and principles for executing government's vision, plans and budget relating to rural development and the revitalisation of the rural economy



through the Comprehensive Rural Development Programme and Rural Development Sector Plans.

- (b) Effective utilisation of all funding instruments across all spheres of government to foster an integrated approach to the revitalisation of the rural areas.
- (c) Institutionalise rural development and strengthen intergovernmental sector coordination through the District Development Model (One Plan) with clear monitoring and reporting systems. Compel all sector departments in all spheres to share their plans and budgets for implementation through the DDM One Plan.
- (d) Accelerate investment in and maintenance of critical infrastructure: road, rail and port basic services, digital connectivity, education, health and human settlement infrastructure to revitalise rural economic development and facilitate industrialisation, agricultural production, agro-processing, value chain management and access to markets.
- (e) Support integrated spatial planning, land use management and economic integration.

The Integrated Rural Development Sector Strategy discusses 6 different pillars driving rural development and the revitalisation of the rural economy in South Africa:

PILLAR 1: INFRASTRUCTURE DEVELOPMENT, MAINTENANCE AND INVESTMENT

PILLAR 2: INDUSTRIALISATION, ENTERPRISE DEVELOPMENT AND JOB CREATION

PILLAR 3: EDUCATION AND SKILLS DEVELOPMENT

PILLAR 4: PROVISION OF BASIC SERVICES

PILLAR 5: LAND AND AGRARIAN REFORM AND TENURE SECURITY.

PILLAR 6: SOCIAL, COMMUNITY AND HUMAN DEVELOPMENT



2.4 LOCAL CONTEXT

2.4.1 Kgetlengrivier Local Municipality Draft SDF, 2024

The fundamental component of any Spatial Development Framework is redress, through the uprooting and undoing of deeply entrenched spatial injustices as well as the negative trickle-down effects, that are as a direct result of segregationist planning apparatus, utilized by the previous administration. The call towards the creation of spaces that are more heterogeneous and inclusive in nature, effectively incorporating, all the wants, needs and aspirations of all citizens, from all walks of life, is one which should ensure policy that simultaneously interrogates and actively denounces previous planning dogmas. Thus, an essential element of any Spatial Development Framework is one that engages in planning mechanisms that are forward in nature, but also have a retrospective element.

Vision: *“Driving sustainable economic growth and strategic spatial capability”*

Key issues facing the local municipality:

- Housing backlog,
- Aging infrastructure,
- Roads & Storm Water,
- Water & Electricity,

- Job creation,
- Land ownership in private hands,
- Cemeteries, and
- Waste Management (land fill sites).

Identified Nodes:

- ✚ Primary Node - Koster
- ✚ Potential Development Nodes -Mazista & Moedwil
- ✚ Tertiary Node - Derby
- ✚ Secondary Node - Swartruggens

Development Objectives:

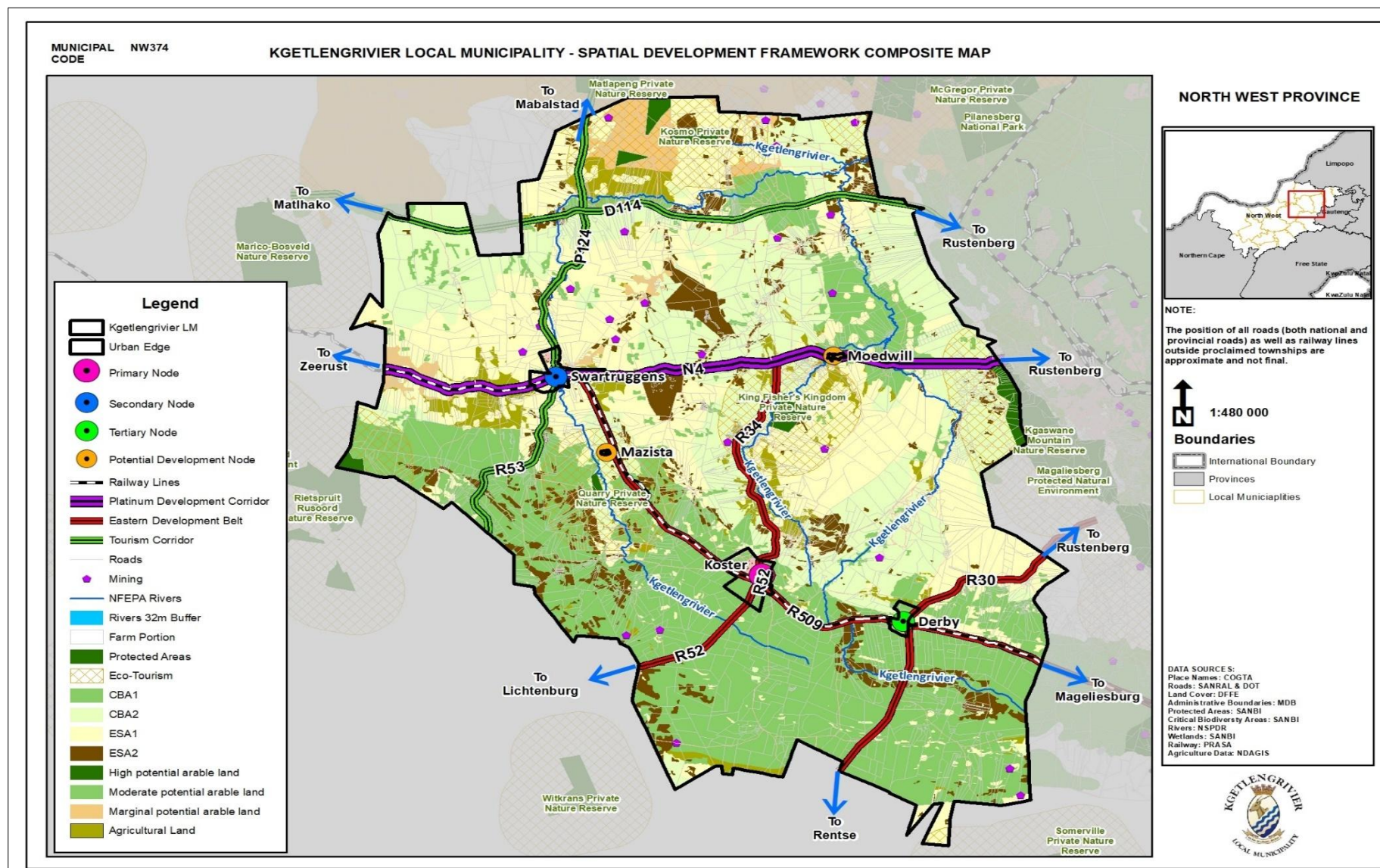
Environmental Management, Spatial Concentration, Movement Grid, Sustainable Human Settlements, Infrastructure Cohesion and Economic Advancement & Employment Generation.

Key proposals:

- Identification of sites for land fill sites and cemeteries.
- Future residential areas for human settlement development.
- Tourism corridors.
- Light industrial & mixed-use zones for alignment with manufacturing within the municipality.



Figure 7: KRLM SDF Composite Map





2.4.2 Moses Kotane Local Municipality SDF, 2019/2024

Moses Kotane Local Municipality is the largest of the five municipalities in the Bojanala Platinum District, located in the northeastern part of the North West province. The municipality is largely rural, with communal land tenure and around 107 villages, alongside two formal towns: Mogwase and Madikwe. Key transport routes include the N4 National Road, which runs 27 km south of the municipality, connecting Rustenburg to Pretoria; the R510, which runs north-south linking Moses Kotane with Rustenburg and Thabazimbi, and the R565, which runs along the southern boundary linking to the R104 towards Rustenburg. Between 2001 and 2016, the population growth in MKLM was modest, with a slight increase from 237,175 to 243,648. Household growth was higher, but both population and household growth rates declined over time. This suggests a limited need for land for future development.

The core spatial element of Moses Kotane Local Municipality is the Pilanesberg National Park, which is a key tourism and economic hub. Surrounding the PNP are the municipality's primary settlement clusters, which represent about 40.6% of the population and major economic activities. Significant mining areas are also located near the park's western and north-western boundaries, influencing the municipality's spatial and economic dynamics. There is a potential tension between

the conservation objectives of the protected area and the development goals of surrounding settlements and economic nodes.

Vision: *“A vibrant municipality with sustainable settlements and rural communities where reliable services are supplied to all residents, and with a growing economy focused on key economic sectors providing decent employment for all citizens.”*

Key proposals:

- Critical Biodiversity Areas & potential biodiversity corridors,
- Mining focus areas,
- Tourism focus areas,
- Agricultural and subsistence agricultural focus areas, and
- Industrial focus areas.



2.4.3 Madibeng Local Municipality SDF, 2015

Madibeng Local Municipality, situated within the Bojanala Platinum District. The 2015 Madibeng SDF highlights the need to prioritize mobility linkages between the northeastern settlements and the southern development core, primarily focused around Brits, the N4, and the municipal development corridors, namely the Platinum and Mabopane-Centurion Development Corridors. The R511 regional road plays a distinct role across different sections of Madibeng. As outlined in the SDF, its primary function in the northern part of the municipality is to serve as a mobility corridor, linking northern settlements to the main development hubs and corridors in the south.

The N4 Platinum Corridor, which runs along the platinum mining belt, serves as the key urban and corridor linkage between Madibeng and Rustenburg Municipality. Settlement expansion along this corridor, particularly in Marikana and its surrounding areas to the east and south, is a significant factor in this connection. The Rooikoppies Dam spans the boundary between Madibeng Municipality and Rustenburg Municipality. According to the Madibeng Spatial Development Framework (SDF), areas surrounding the dam should be designated as public spaces before any private development initiatives are considered. This strategic recommendation should be factored into the planning for the cross-border alignment of the Rooikoppies Dam.

Vision: “A Municipality characterised by social equity, environmental sustainability and efficient functionality. “

The spatial objectives and strategies are consolidated and narrowed down to the following three overarching development concepts structuring elements:

- ❖ Natural form giving elements,
- ❖ Strategic Development areas, and
- ❖ Linkages.

Identified Nodes:

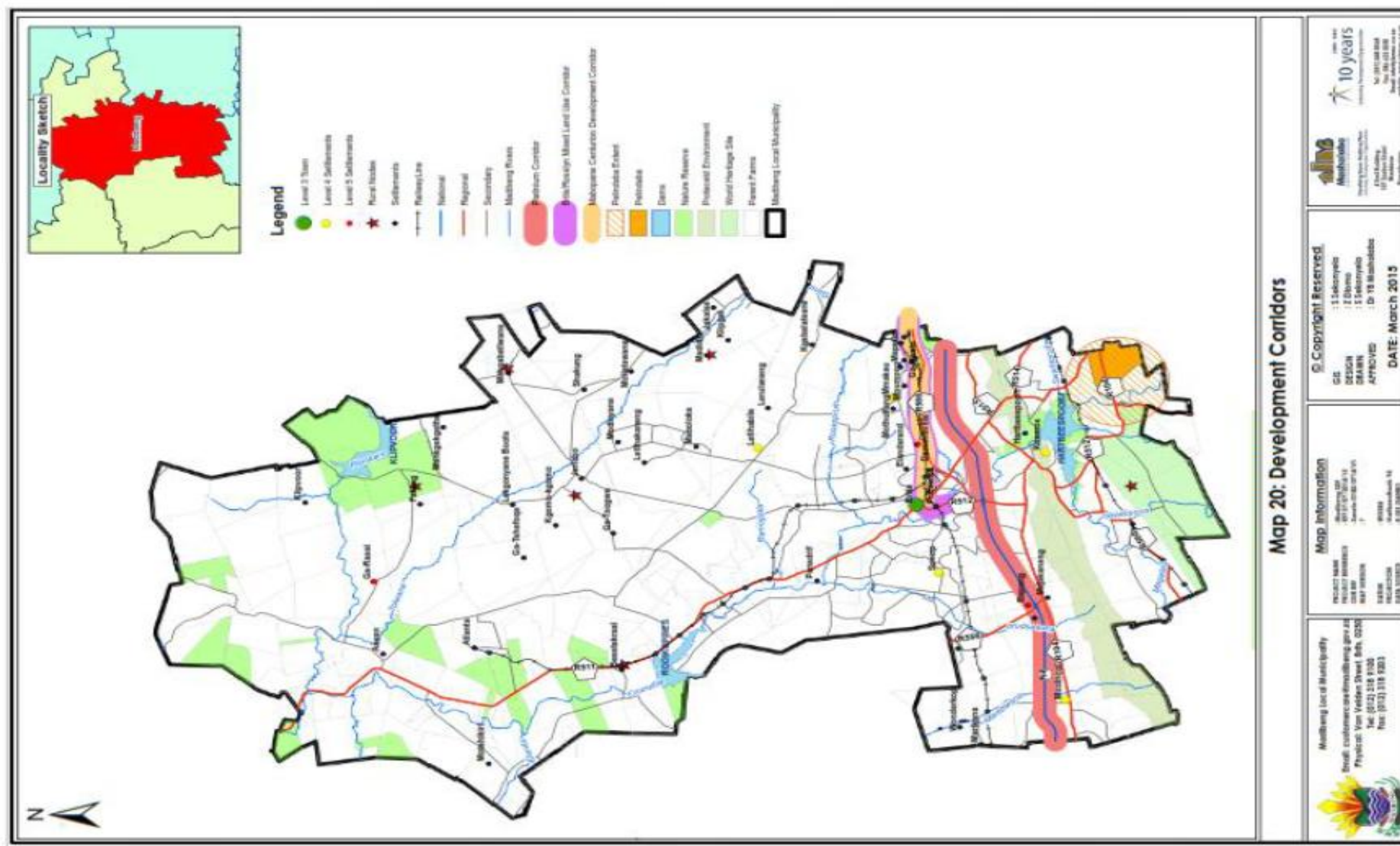
- ✚ First order service node - Brits
- ✚ Rural Nodes - Madidi, Jericho, Fafung, Makgabatlwane

Key Proposals:

- Urban Development Areas,
- Reinforcement of Rural Service Centres,
- Tourism and Conservation (Eco-Tourism, Heritage Tourism, Cultural Tourism, Aqua-Tourism & Agri-Tourism),
- Agricultural Development,
- Transport Linkages,
- Townships,
- Corridor Development, and
- Mining Areas.



Figure 9: Madibeng SDF Composite Map





2.4.4 Moretele Local Municipality Draft SDF, 2024

The fundamental component of any Spatial Development Framework is redress, through the uprooting and undoing of deeply entrenched spatial injustices as well as the negative trickle-down effects, that are as a direct result of segregationist planning apparatus, utilized by the previous administration. The call towards the creation of spaces that are more heterogeneous and inclusive in nature, effectively incorporating, all the wants, needs and aspirations of all citizens, from all walks of life, is one which should ensure policy that simultaneously interrogates and actively denounces previous planning dogmas. Thus, an essential element of any Spatial Development Framework is one that engages in planning mechanisms that are forward in nature, but also have a retrospective element.

Vision: *“Sustainably transforming the spatial form, through innovative spatial strategies”*

Key issues facing the local municipality:

- Dispersed settlement pattern,
- Informal land development,
- Aging infrastructure,
- Roads, Water & Electricity,

Identified Nodes:

- ✚ Primary Node cluster - Mathibestad, Makapanstad, Danhouse, Sespond, Ramaphosa & Dertig.

- ✚ Secondary Node cluster – Ga-Motla, Ratjiepene, Ga-Moeka and Swartdamstad
- ✚ Tertiary A – Moretele and Suteleng
- ✚ Tertiary B – Ngobi and Swartboom
- ✚ Tertiary C – Syfeskui and Walman
- ✚ Potential Development Node - Maubane

Development Objectives:

Environmental Management, Spatial Concentration, Movement Grid, Sustainable Human Settlements, Infrastructure Cohesion and Economic Advancement & Employment Generation.

Key proposals:

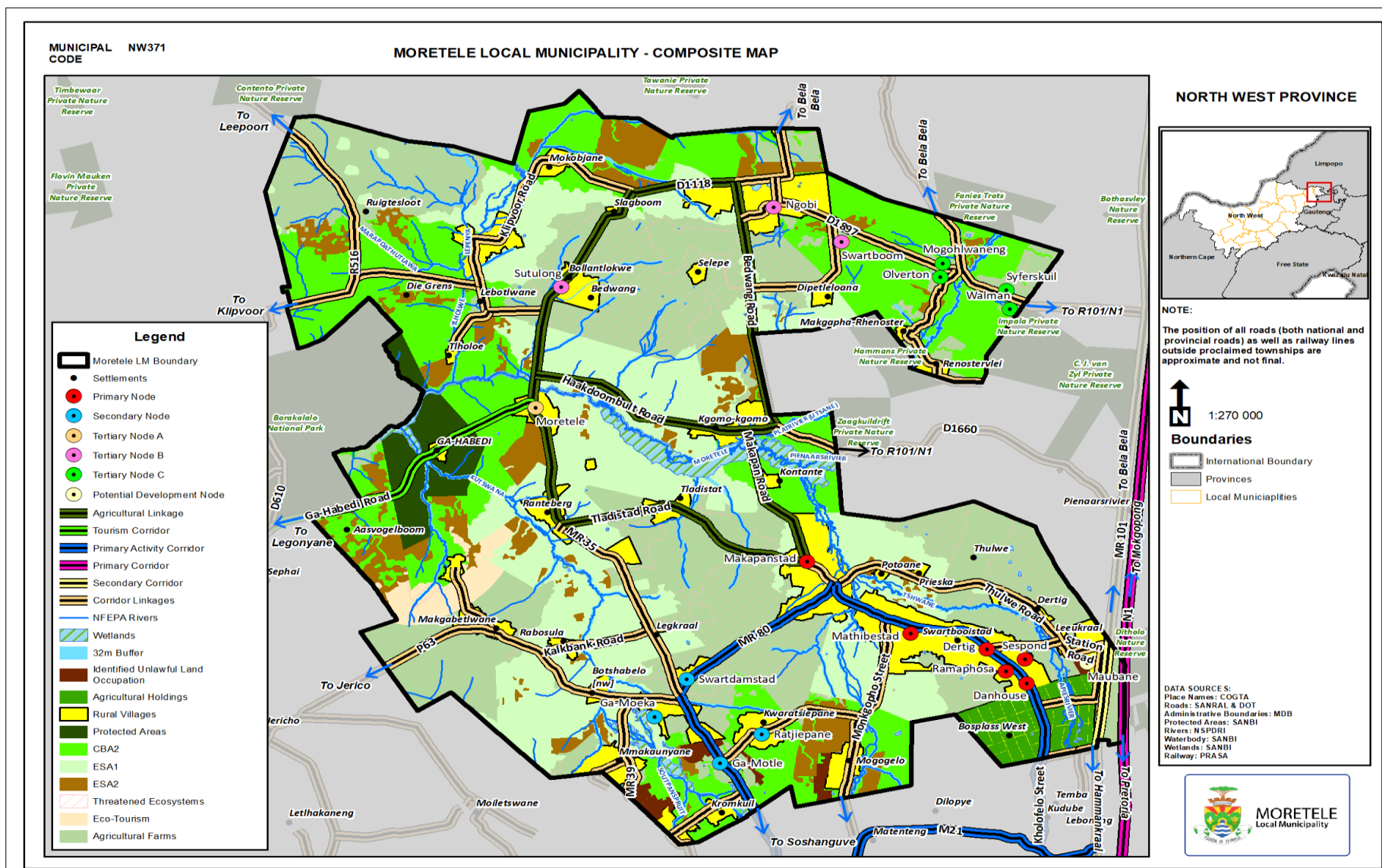
- Formalisation & In-Situ upgrading,
- Future residential areas for human settlement development.
- Tourism corridor,
- Grazing areas,
- Light industrial & mixed-use zones for alignment with manufacturing within the municipality.

2.4.5 Rustenburg Local Municipality SDF

The Rustenburg Local Municipality is situated in the Bojanala Platinum District. A request for the municipality's SDF has been submitted, and we are currently awaiting their response.



Figure 10: MLM SDF Composite Map





2.4.6 Local Municipalities IDP's within the Bojanala Platinum District Municipality

Table 2: LM IDP's within the BPD

Municipality	IDP Vision	Objectives	Challenges
<i>Kgetlengrivier Local Municipality, 2022/27</i>	"A reliable, people-centred, performance-driven champion of sustainable services."	<ul style="list-style-type: none"> - Plan for Service Provision and Budget Implementation (both top layer and technical). - Performance management and performance contracts. - Complementary and legislative reporting, such as monthly, half-year, and annual reporting on financial and non-financial performance metrics. 	<ul style="list-style-type: none"> - None availability of budget - Shortage of Human capacity - None reviewed by laws & policies - No localised building by laws - Old & out-dated tariff - Land availability - Incomplete township process - Blocked projects - No title deeds - Illegal occupation of houses - Servicing project areas - Double occupation - Land availability - Non registered sites - Illegal land invasion
<i>Madibeng Local Municipality, 2022/27</i>	"To be the prosperous platinum and green tourism city."	<ul style="list-style-type: none"> - Introducing fresh concepts to boost economic growth building a foundation for expansion. - Making use of development funding. - Development of human resources community capacity building - Changing the workforce ensuring holistic, integrated, and sustainable development. - Connecting Madibeng's economy to that of its neighbours and encouraging multiplier effects. - Including the benefits of agglomeration and clustering in the economy. - Growing the travel and tourism sector including rural communities in development. 	<ul style="list-style-type: none"> - Poverty - Inequality - Unemployment
<i>Moses Kotane Local Municipality, 2022/23</i>	"A caring municipality underpinned by minerals, agricultural and eco-tourism economy for the advancement of sustainable services to our communities"	<ul style="list-style-type: none"> - To create and enhance community infrastructure, public safety, response to disasters, and a healthy environment. - Sound adherence to all laws and regulations imposed on local government is required for financial management. - To encourage professionalism, efficiency, and accountability within the organization. - To establish a setting that is supportive of social and economic advancement. - Disaster management 	<ul style="list-style-type: none"> - High unemployment rate; large municipal area; occasionally pricey for the population to get certain services - The area's unlawful mining-related mushrooming is a reason for concern. The SAPS, the Municipality, and the Department of Mineral and Resources are monitoring the cases. - Rising levels of unlawful trash disposal activities; inaccessible roads and inadequate special planning in



			<p>rural areas; increasing demands for cemeteries' infrastructure development, such as roads and fencing; and insufficient resources, such as a lack of employees (vacancies) and a limited budget.</p> <ul style="list-style-type: none"> - Poor ability to create, examine, and enforce municipal rules. Inability to manage catastrophe incident management. Because there are no enforcement resources, there is very little enforcement and very little adherence to the rule of law.
<p>Rustenburg Local Municipality, 2022/27</p>	<p>“A smart and environmentally friendly city where all communities enjoy a high quality of life and diversity.”</p>	<ul style="list-style-type: none"> - Create a thriving, diverse local economy with a focus on industries with significant economic value. - Create a supportive and enabling business climate to increase RLM's competitiveness as a top travel, investment, and trade destination. - Support Development of sustainable small, medium, and microbusinesses to promote broad-based black economic empowerment. - Enable the development of the township and rural economies to transform the local economy. - To promote local economic development programs, establish and maintain strong stakeholder relationships and public-private partnerships with local industries. - By working to promote economic growth, development, and change, LED plays a crucial part in combating the triple crises of poverty, inequality, and unemployment. 	<ul style="list-style-type: none"> - Poor service delivery - Unemployment and high influx of people - Land invasion - Moral degeneration or delay - Theft and vandalization of municipal properties
<p>Moretele Local Municipality, 2022/23</p>	<p>“A Developing Moretele for Growth and Prosperity for All”</p>	<ul style="list-style-type: none"> - To guarantee that all households have access to sustainable services and infrastructure. - To ensure access to public amenities, as well as to advance neighbourhood security, growth, and sustainable livelihoods. - To encourage and uphold responsible financial management in order to improve institutional sustainability and access to essential services. - Promoting and enhancing professional institutional transformation through enhanced technology and human resources systems. - To encourage and improve economic access, growth, and development. - To advance and strengthen efficient governance frameworks for better service provision. - To improve and advance effective government through reliable communication channels. - To advance and strengthen integrated municipal planning. - To advance institutional transformation, growth, and good governance 	<ul style="list-style-type: none"> - Unemployment - Dry taps. - Lack of infrastructure - Water supplied through tanks which has a cost implication - Huge backlogs on sanitation - Current VIP sanitation facilities erected in various villages has spillage effect - Low revenue collection and growing aging population. - The ongoing difficulties in the national and local economy



2.5 GUIDING PRINCIPLES (SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, ACT 16 OF 2013)

The implications of the preceding National, Provincial and Municipal Policy and Plan analysis has been summarised in table 3 below. These summary principles must be taken into cognisance during the preparation of the Bojanala Platinum District Municipality Spatial Development Framework.

Table 3: Summary of Guiding Principles for the development of the BPDMSDF

Principles & objectives relevant for spatial development	Legislation/ policy document	Summary principle	Implications for municipal SDF
Ensure the provision of services to communities in a sustainable manner. Residential development with potable water, adequate sanitary facilities and domestic energy supply. Enabling reliable supply and basic service delivery. Ensure that all communities have access to basic services. Provide municipal health services Retrofit existing non-sustainable human settlements with the public infrastructure and services required.	Constitution of the Republic of South Africa, Act 108 of 1996. National Housing Act, Act 107 of 1997 and the National Housing Code 2009. National Infrastructure Plan, 2050 and the National Development Plan, 2030. Bojanala Platinum District Municipality Integrated Development Plan 2022/2027 Constitution of the Republic of South Africa, Act 108 of 1996 and the National Development Plan, 2030.	Provide basic services to all communities to at least minimum levels of service.	Identify the location of all settlements and communities with services below minimum levels. Determine priorities for the provision and/or upgrading of basic services and infrastructure investments. Identify well-located informal settlements for upgrading.
Acceleration of investments in road, rail, bulk water, water treatment and transmission infrastructure. Invest in infrastructure development. Facilitate the maintenance of roads	National Infrastructure Plan, 2050. Bojanala Integrated Transport Master Plan. Bojanala Platinum District Municipality Integrated Development Plan 2022/2027	Invest in required bulk infrastructure to support development. Provide accessibility and permeability to corridors of development to all through efficient transport infrastructure.	Identify the type and location of priority bulk infrastructure required. Identify development and infrastructure investment along activity and mobility corridors, existing and emerging economic nodes.
The major concentrations of urban poor should be spatially linked into the mainstream of city life through investments in transport infrastructure and the connecting corridors of development. Establish functional linkages between towns and settlements and to ensure that the main linking road network is upgraded Capitalise on the strategic location of the municipality, and establish regional and provincial linkages. Consider the impact of large volumes of daily commuting through KRLM.	National Development Plan, 2030 Bojanala Platinum District Municipality Integrated Development Plan 2022/2027 Bojanala Integrated Transport Master Plan.	Develop and upgrade transport infrastructure taking cognisance of functional linkages and interaction patterns.	Identify the main transport infrastructure components to be developed or upgraded.
Ensure people have access to social and economic services, opportunities and choices.	Integrated Urban Development Framework, 2016.	Provide equitable access to social infrastructure and amenities.	Identify the extent and location of social facilities and amenities to be provided.



<p>Residential development in areas allowing convenient access to economic opportunities and health, educational and social amenities.</p> <p>Establish a hierarchy of service centres to ensure equitable access to social infrastructure and to promote local economic development.</p> <p>Promote skills development and ensure organisation alignment.</p>	<p>National Housing Act, Act 107 of 1997 and the National Housing Code 2009.</p> <p>Bojanala Platinum District Municipality Integrated Development Plan 2022/2027.</p> <p>Bojanala Platinum District Municipality Integrated Development Plan 2022/2027</p>		
<p>Economic hubs supporting diverse economic activities should be developed within historically black townships to integrate these areas into wider economic functioning localities.</p> <p>Residential development in areas allowing convenient access to economic opportunities and health, educational and social amenities.</p> <p>To ensure people have access to social and economic services, opportunities and choices.</p> <p>Harness urban dynamism for inclusive, sustainable economic growth and development.</p> <p>Establish a hierarchy of service centres to ensure equitable access to social infrastructure and to promote local economic development.</p> <p>The transition towards a green economy ensures sustainable economic growth, drive inclusive economic development and derive optimum transformative benefit from urbanisation and urban living.</p>	<p>National Development Plan, 2030.</p> <p>National Housing Act, Act 107 of 1997 and the National Housing Code 2009.</p> <p>Integrated Urban Development Framework, 2016.</p> <p>Integrated Urban Development Framework, 2016.</p> <p>Bojanala Platinum District Municipality Integrated Development Plan 2022/2027.</p> <p>National Spatial Development Framework, 2022.</p>	<p>Provide equitable access to economic services and opportunities.</p>	<p>Establish spatial patterns of differentiated access to economic opportunities to inform spatial planning.</p> <p>Optimise infrastructure investment, expand access to basic services and guide development through urban planning.</p>
<p>Facilitate the development of mining, agricultural activities and tourism opportunities.</p> <p>Support the commercialisation of small scale and/or subsistence farming activities.</p>	<p>National Infrastructure Plan, 2050.</p> <p>Bojanala Platinum District Municipality Integrated Development Plan 2022/2027</p>	<p>Support the development of small scale and commercial agricultural activities.</p>	<p>Identify the location and extent of areas with the highest agricultural potential.</p> <p>Identify the location of concentrations of small-scale agricultural activities.</p>
<p>Facilitate the development of mining, agricultural activities and tourism opportunities.</p> <p>Maximise the mining potential in the municipal area without impeding negatively on the tourism and agricultural potential.</p>	<p>National Infrastructure Plan, 2050.</p> <p>Bojanala Platinum District Municipality Integrated Development Plan 2022/2027.</p>	<p>Maximise opportunities provided by the mining sector without impeding negatively on other economic sectors.</p>	<p>Identify the lifespan of existing mining operations.</p> <p>Identify the location and extent of potential future mining activities and determine potential bulk infrastructure and other requirements.</p>
<p>Establishment and maintenance of habitable, stable and sustainable public and private residential developments.</p> <p>Building sustainable communities.</p>	<p>National Housing Act, Act 107 of 1997 and the National Housing Code 2009.</p>	<p>Development of sustainable residential development.</p>	<p>Consider all dimensions of sustainable human settlements in the location and detailed planning of new residential development.</p>



Ensuring the provision of habitable and sustainable human settlements.	North West Department of Human Settlements: Strategic Plan.		
Well-located informal settlements should be upgraded and situated in development of areas with permanent residential structures with secure tenure, ensuring internal and external privacy and providing adequate protection against the elements.	National Development Plan, 2030. National Housing Act, Act 107 of 1997 and the National Housing Code 2009.	Upgrading of informal settlements where feasible	Identify the location of informal settlements Identify suitability and priority for upgrading
The new ghetto formation should be avoided by promoting a mix of race and income groups in new housing developments.	National Development Plan, 2030.	Promote balanced residential development informed by local circumstances.	Provide appropriate guidelines for land use and socio-economic mix in new residential developments.
Urban sprawl should be contained and reversed as denser forms of development are more efficient.	National Development Plan, 2030.	Limit urban sprawl through compact development, infill and densification.	Consistent application of the principles of compact development and densification in spatial planning and development at both municipal and local levels.
Support spatial integration to forge new spatial forms in settlement, transport, social and economic areas.	Integrated Urban Development Framework, 2016.		
Integrate and consolidate the fragmented and dispersed settlement structure in all settlements.	Bojanala Platinum District Municipality Integrated Development Plan 2022/2027		
Focus development on short term priority areas for urbanisation.	Bojanala Platinum District Municipality Integrated Development Plan 2022/2027		
Consolidate the urban structure through infill development (informal, subsidised and/or bonded) in the Strategic Development Areas along identified corridors.	Bojanala Platinum District Municipality Integrated Development Plan 2022/2027		
Define Urban Development Boundaries in areas where appropriate to contain urban sprawl and to promote infill development and densification.	Bojanala Platinum District Municipality Integrated Development Plan 2022/2027		
More attention should be given to the design and quality of urban public space.	National Development Plan, 2030.	Provision of quality public spaces in settlements.	Incorporate planning and provision of public spaces at municipal and local level spatial planning.
Sustaining our ecosystems and using natural resources efficiently.	National Strategy for Sustainable Development, 2011.	Sustain ecosystems and natural resources.	Incorporate spatial dimensions of biodiversity and natural resources in spatial planning.
Respond effectively to climate change.			
Protect, enhance and manage the natural environmental resources in the municipality.	Bojanala Platinum District Municipality Integrated Development Plan 2022/2027		



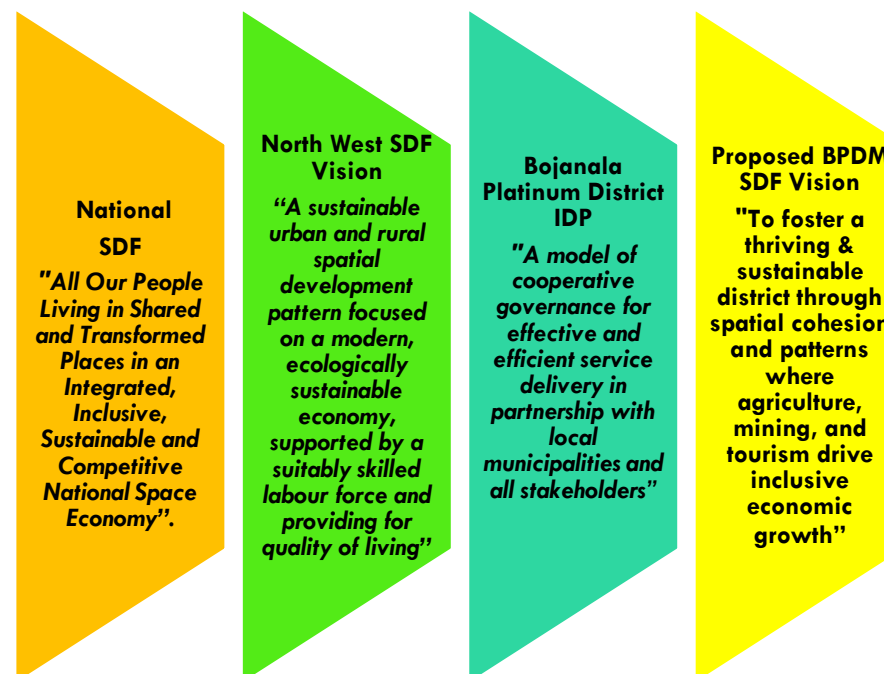
2.6 VISION DIRECTIVES

The summary principles relevant to the formulation of the Bojanala Platinum District Municipality SDF gives clear spatial direction for development within the Municipality. These principles are included below:

- ❖ Provide basic services infrastructure for the whole municipality.
- ❖ Sustainable residential development should be advanced.
- ❖ Ensure safe and healthy communities.
- ❖ Support the development of agricultural activities.
- ❖ Protect ecosystems and natural resources.
- ❖ Focus on Infrastructure Development in key areas to promote economic development.
- ❖ Optimise manufacturing opportunities within the municipality.
- ❖ Optimise tourism opportunities within the municipality.
- ❖ Provision of quality public spaces in settlements.
- ❖ Promote tourism within the municipality by developing better access to tourism areas.
- ❖ Provide fair access to social infrastructure and amenities.
- ❖ Provision of quality public spaces in settlements.
- ❖ Limit urban sprawl through compact development, infill and densification.
- ❖ Provide accessibility and permeability to corridors of

development to all through efficient transport infrastructure upgrading and maintenance.

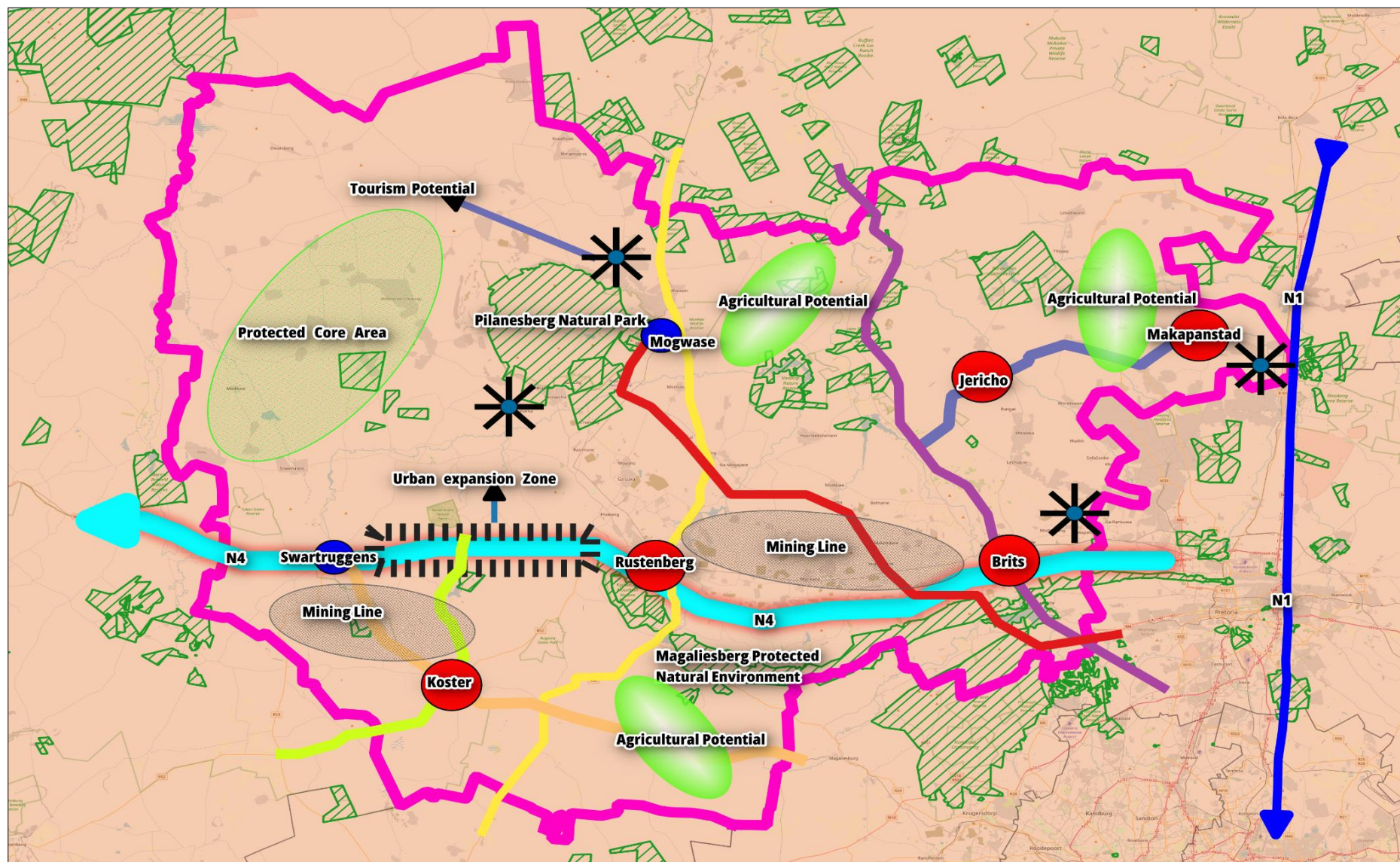
In formulating a spatial development vision that accurately reflects the nature and characteristics of the municipality, it is crucial to consider the analysis of existing planning and policy documents relevant to the municipal area. The starting point for devising the municipal SDF vision should involve assessing district and local priorities, as well as the vision statements of the province, district, and the local municipality. Some of the formulated visions impacting the district are indicated below:



DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



Figure 11: BPDMSDF Vision Conceptualisation



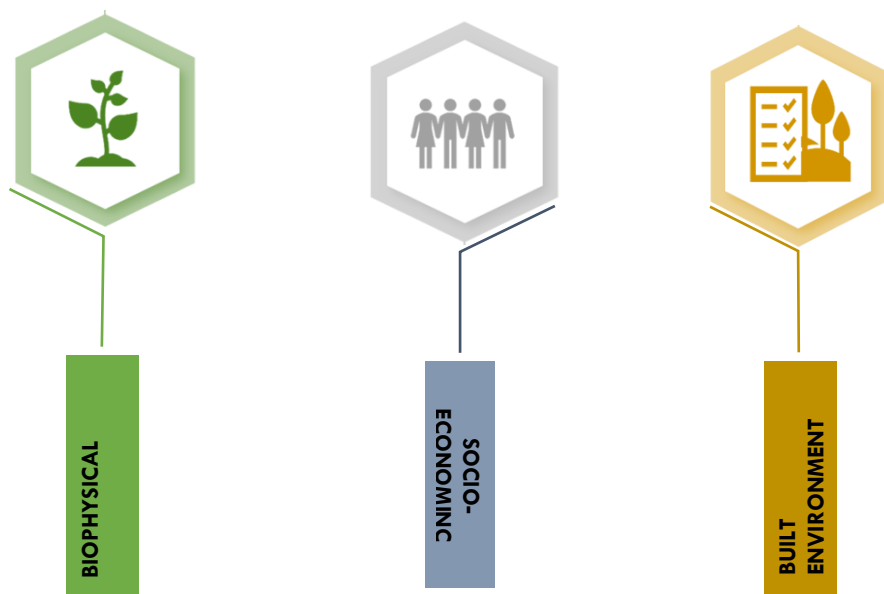


3. STATUS QUO ANALYSIS



3. SPATIAL CHALLENGES & OPPORTUNITIES

The objective of conducting a status quo analysis is to assess the standard and quality of resources within the municipal jurisdiction. This aims to establish the current baseline and quality of available resources. Through this analysis, it becomes possible to identify challenges that impede growth and development, while also pinpointing potential opportunities inherent in the District Municipality's resource base. To facilitate a comprehensive analysis of the local municipality's resource base, these resources have been categorised into the Socio-Economic, Biophysical Environment and the Built Environment.



3.1 INSTITUTIONAL STRUCTURE

3.1.1 Municipal Boundaries

Bojanala Platinum District Municipality

Bojanala Platinum District Municipality (BPDM) consists of five local municipalities, namely Rustenburg Local Municipality (RLM), Madibeng Local Municipality (MDLM), Moses Kotane Local Municipality (MKLM), Kgetlengrivier Local Municipality (KRLM), and Moretele Local Municipality (MLM). In total Bojanala Platinum District Municipality constitutes 154 wards within its jurisdiction (refer to map 1). The size of the Bojanala Platinum District of the North West Province is 18 300 km² and comprises 17% of the total area of the province, with a population of 1 671 586, comprising 44% of the population of the province.

Kgetlengrivier Local Municipality (KRLM)

According to the Kgetlengrivier LM 2022/2023 IDP Review, KRLM consists of 7 wards, it covers an area of about 39 121.31 ha in size.

Madibeng Local Municipality (MDLM)

Madibeng Local Municipality is demarcated into 41 wards, comprising 9000 farm portions and 43 villages covering 3 814 km².



Moses Kotane Local Municipality (MKLM)

According to the Moses Kotane Local Municipality 2020/2021 reviewed IDP covers an area of approximately 5220km². MKLM consists of 35 wards with 107 rural villages.

Rustenburg Local Municipality (RLM)

The RLM area comprises a total area of 3,419 km² demarcated into 45 wards.

Moretele Local Municipality (MLM)

The Municipality consists of twenty-six 26 wards made out of 76 several settlements or villages spread over 1369 km².

3.1.2 Traditional Authorities

The Moretele Local Municipality recognises Four (4) traditional authorities within their jurisdiction. In Madibeng Local Municipality, the traditional areas dominate the north-western region of the municipality. MDLM recognises Four (4) traditional authorities. The Rustenburg Local Municipality recognises Three (3) traditional authorities. Moses Kotane Local Municipality recognises Twenty-Two (22) traditional authorities. Kgetlengrivier Local Municipality doesn't have traditional councils within its jurisdiction.

3.1.3 Communal Property Association

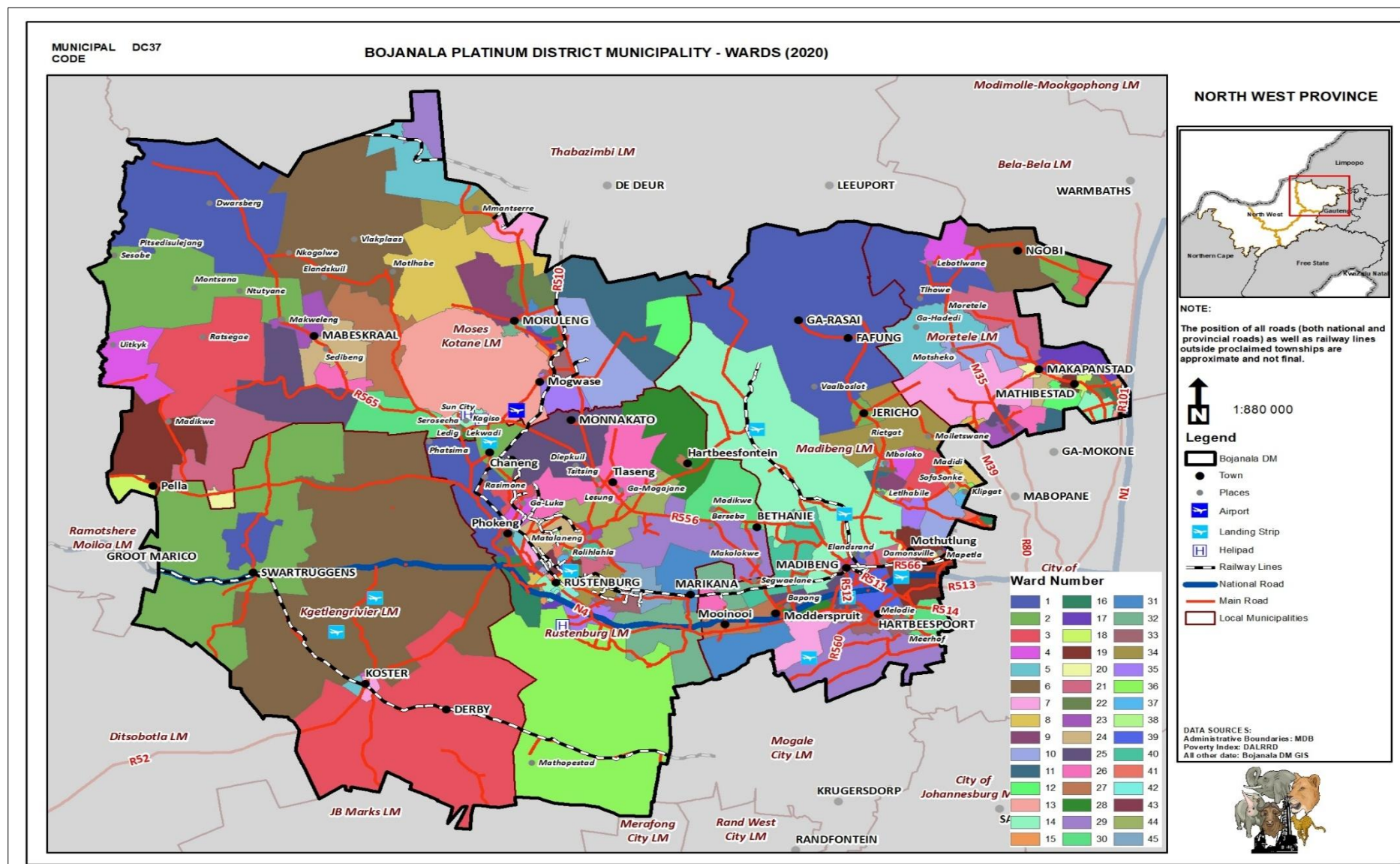
The BPDM has a total of 53 Communal Property Associations, as according to the NW CPA Database 2024, the full details and their description have been attached as Annexure A.

A number of these CPAs have been established under South Africa's land reform policies, driven by both restitution and the redistribution of land via grant-based programs, managed under the Communal Property Associations framework. BPDM, home to large rural landscapes and a vast traditional authority-controlled areas, exhibits both types of restored communal lands in redistributed land parcels, while CPAs are spread across the district, their highest density are on the Northern areas in parts of Madibeng, Moretele and Moses Kotane Local Municipalities, and they are fairly least within the Rustenburg Local Municipality.

According to the North West CPA Database 2024, the total transferred hectares of the CPAs is approximately 285 296.826 Hectares as per the title deeds, of the overall 520 146.501 Hectares which was intended to be transferred as per the memo.



Map 3: Ward Boundaries within the BPDM



DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK

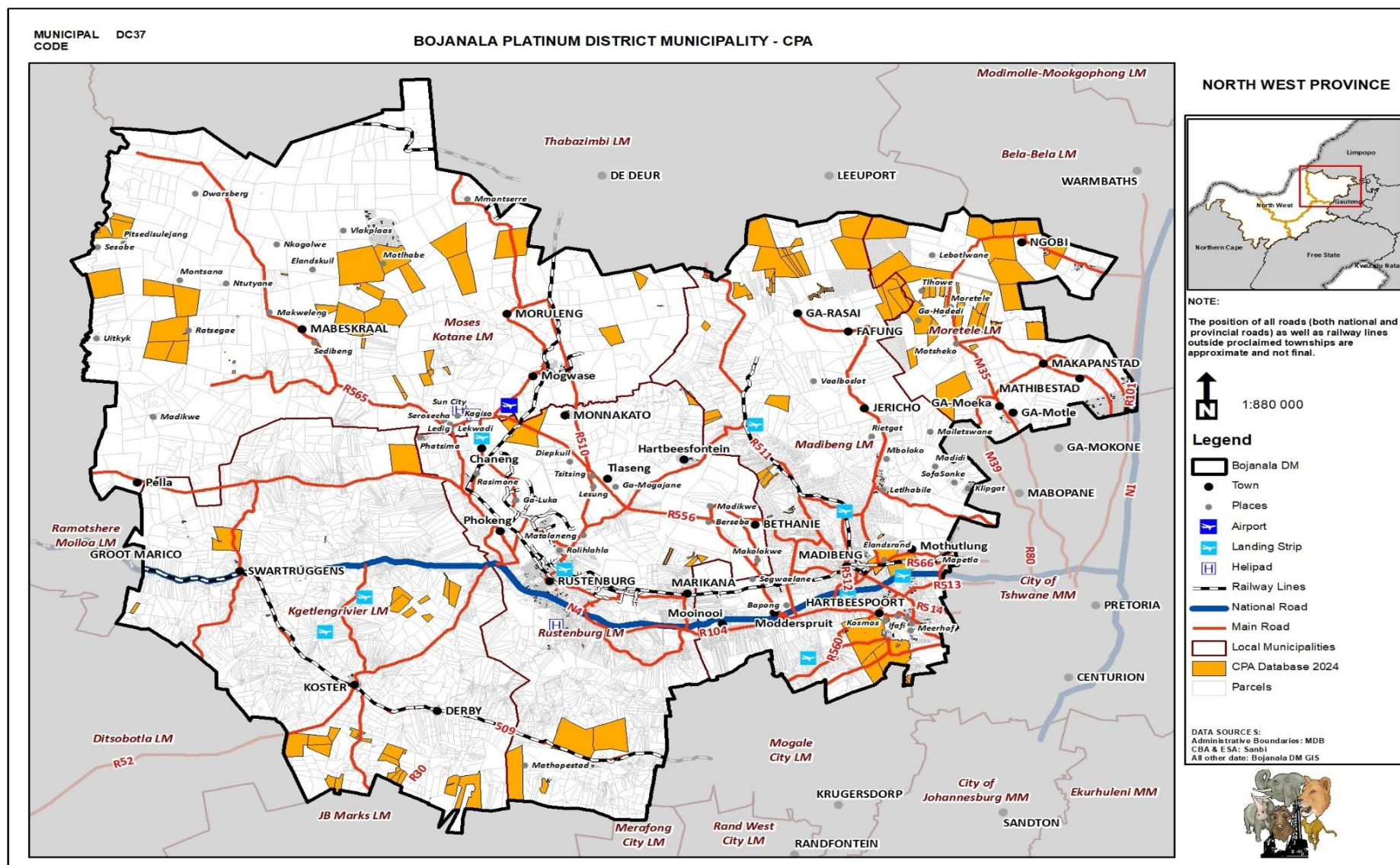


SPATIAL CHALLENGES & OPPORTUNITIES





Map 5: CPAs within the Bojanala Platinum District Municipality





3.2 SOCIO-ECONOMIC ANALYSIS

The socio-economic analysis ensures the efficient allocation of scarce resources by offering a strategic perspective on short- and medium-term issues aimed at improving the municipality. SEA will assist in evaluating the environmental changes and conducting cost-benefit analyses related to various factors within the municipality, such as economic activities, employment trends, housing demand, climate change, cultural and social values, education, agricultural inputs (like water and electricity), and other socio-economic pressures. This analysis builds on the biophysical layer by demonstrating the connection between the population's needs and the natural resource base. In simpler terms, the distribution of the population is directly influenced by the services provided by the biophysical environment.

3.2.1 Key characteristics of the Bojanala District Municipality

Table 4: Key Statistics for Bojanala Platinum District Municipality

Name	2011	2022
Total population	1 507 505	1 624 144
Young children (0-14 years)	26.4%	26.3%
Working age population (15-64 years)	68.3%	67.7%
Elderly (65+ years)	5.3%	5.9%
Dependency ratio	46.4	47.6
Sex ratio	111.4	103.3

No schooling (20+ years)	7.5%	5.5%
Higher education (20+ years)	7.0%	6.9%
Number of households	501 686	531 492
Average household size	3.0	3.1
Formal dwellings	68.8%	82.2%
Flush toilets connected to sewage	37.2%	54.1%
Weekly refuse disposal service	49.2%	57.5%
Access to piped water in the dwelling	26%	41.6%
Electricity for lighting	84.2%	94.1%

Source: Statistics South Africa, 2022

The key statistics for BPDM highlight significant changes between 2011 and 2022, with both positive and negative trends. The population has grown considerably, increasing from 1 507 505 in 2011 to 1 624 144, indicating a willingness to live in the municipality. Service delivery has also improved notably, particularly in electricity, with over 94.1% of households now having access to it. Progress has been made in sanitation as well, with the percentage of households connected to sewage systems rising from 37.2% in 2011 to 54.1% in 2022. Access to tap water has also increased from 26% to 41.1%, though this still points to significant challenges in water provision. A concerning trend, however, is the decline in the proportion of people over the age of 20 with higher education, which decreased slightly from 7% in 2011 to 6.9% in 2022. This reduction could contribute to a shortage of skilled labour, potentially hindering the municipality's economic development.



KGETLENGRIVIER LOCAL MUNICIPALITY



TOTAL POPULATION

54 759



MALE

49.4%

FEMALE

50.6%



ACCESS TO PIPED WATER IN THE DWELINGS

58%



EDUCATIONAL INSTITUTION ATTENDANCE

71.3%



HOUSEHOLD IN FORMAL DWELLINGS

89.5%



FLUSH TOILETS CONNECTED TO SEWERAGE

88.6%



ELECTRICITY FOR LIGHTING

94.4%



WEEKLY REFUSE DISPOSAL SERVICE

69.4%

MOSES KOTANE LOCAL MUNICIPALITY



TOTAL POPULATION

265 668



MALE

50%

FEMALE

50%



ACCESS TO PIPED WATER IN THE DWELINGS

29.7%



EDUCATIONAL INSTITUTION ATTENDANCE

72.7%



HOUSEHOLD IN FORMAL DWELLINGS

90.0%



FLUSH TOILETS CONNECTED TO SEWERAGE

32.6%



ELECTRICITY FOR LIGHTING

96.5%



WEEKLY REFUSE DISPOSAL SERVICE

48.7%

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



MORETELE LOCAL MUNICIPALITY



TOTAL POPULATION

219 120



MALE

49.5%

FEMALE

50.5%



ACCESS TO PIPED WATER IN THE DWELLINGS

21.1%



EDUCATIONAL INSTITUTION ATTENDANCE

73.7%



HOUSEHOLD IN FORMAL DWELLINGS

91.6%



FLUSH TOILETS CONNECTED TO SEWERAGE

18.9%



ELECTRICITY FOR LIGHTING

97.6%



WEEKLY REFUSE DISPOSAL SERVICE

33.8%

RUSTENBURG LOCAL MUNICIPALITY



TOTAL POPULATION

562 031



MALE

50%

FEMALE

48%



ACCESS TO PIPED WATER IN THE DWELLINGS

53.0%



EDUCATIONAL INSTITUTION ATTENDANCE

68.8%



HOUSEHOLD IN FORMAL DWELLINGS

85.9%



FLUSH TOILETS CONNECTED TO SEWERAGE

72.8%



ELECTRICITY FOR LIGHTING

94.5%



WEEKLY REFUSE DISPOSAL SERVICE

75.6%

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



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



MADIBENG LOCAL MUNICIPALITY



TOTAL POPULATION
522 566



MALE 50.7%
FEMALE 49.3%



**ACCESS TO PIPED
WATER IN DWELLING**
39.4%



**EDUCATIONAL
INSTITUTION
ATTENDANCE**
71.2%



**HOUSEHOLDS IN
FORMAL DWELLING**
76.4%



**FLUSH TOILETS
CONNECTED TO
SEWERAGE**
51.2%



**ELECTRICITY
FOR LIGHTING**
91.3%



**WEEKLY REFUSE
DISPOSAL SERVICE**
47.3%

3.2.2 Demographics

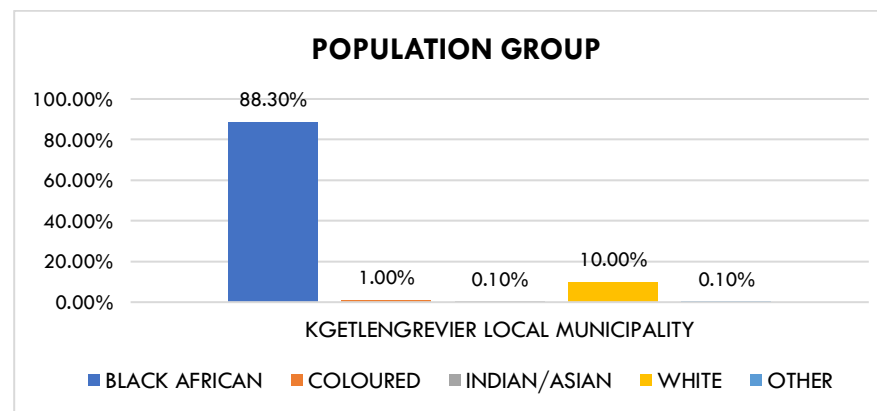
Table 5: BPDM Demographics

Population Group	Counts	Percentage
Black African	1 549 218	94.5%
Coloured	10 898	0.7%
Indians/Asian	1 320	0.1%
Whites	59 560	3.7%
Others	2 803	0.7%

Source: Statistics South Africa, 2022

According to the Statistics South Africa 2022, the most dominant population group in the BPDM is black African people, who constitute to 94.5 % of the total population. Other groups include Whites who are only 3.7%, Coloured who are 0.7% and Indian/Asian who are 0.1%. It can be concluded that BPDM is black African dominated municipality.

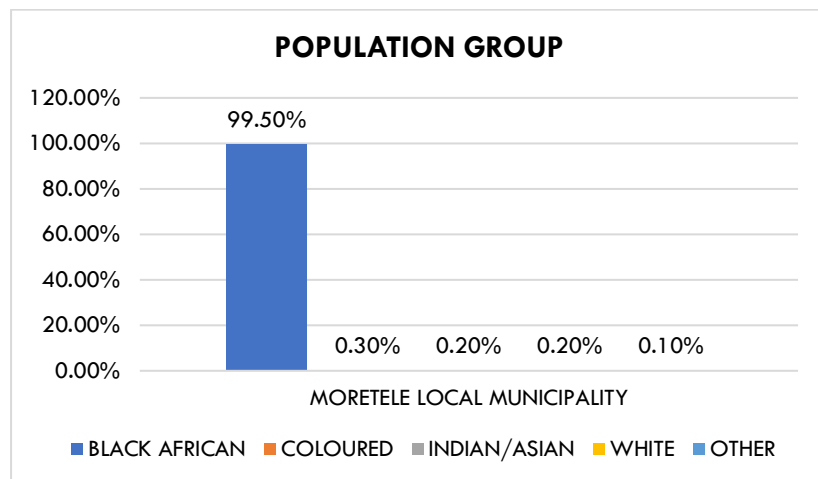
Figure 12: Kgetlengrivier Local Municipality Population Group



Source: Statistics South Africa, 2022

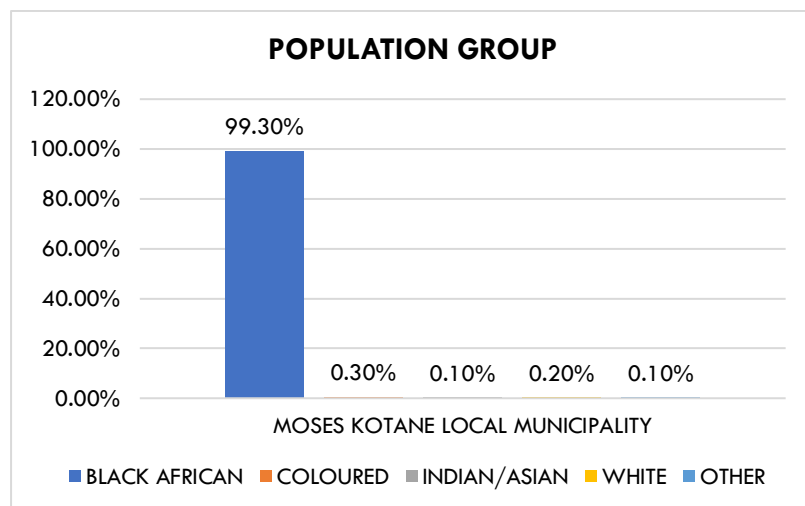


Figure 13: Moretele Local Municipality Population Group



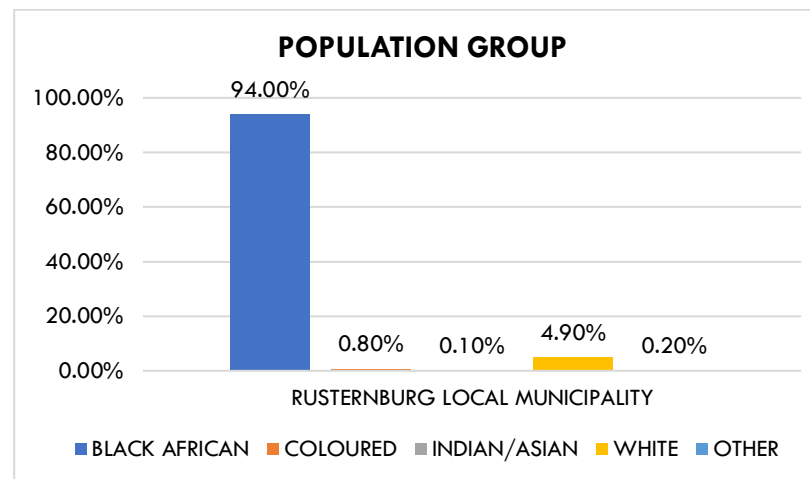
Source: Statistics South Africa, 2022

Figure 14: Moses Kotane Local Municipality Population Group



Source: Statistics South Africa, 2022

Figure 15: Rustenburg Local Municipality Population Group



Source: Statistics South Africa, 2022

3.2.2.1 Population Growth Estimates

Based on the population findings, BPDM had a population of 1 507 505 in 2011 and based on census 2022, the BPDM has a population of 1 624 144. Based on this, the annual growth rate is 0.68%. This figure serves as the foundational basis for developing future population projections within the region.



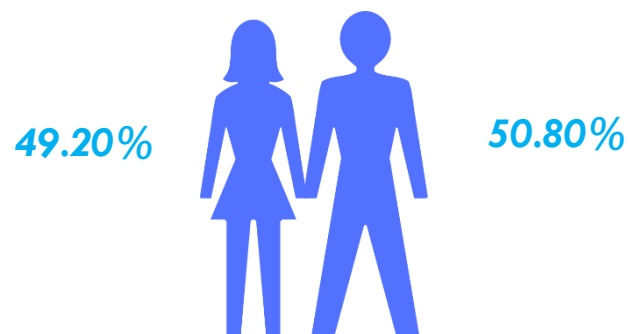
Table 6: Bojanala Platinum District Municipality population projections

Year	Population
2022	1 624 144
2023	1 635 188
2024	1 646 349
2025	1 657 620
2026	1 668 999
2027	1 680 491
2028	1 692 094
2029	1 703 810
2030	1 715 642

Source: Projections adopted based on Statistics South Africa 2022

3.2.2.2 Sex & Age Distribution

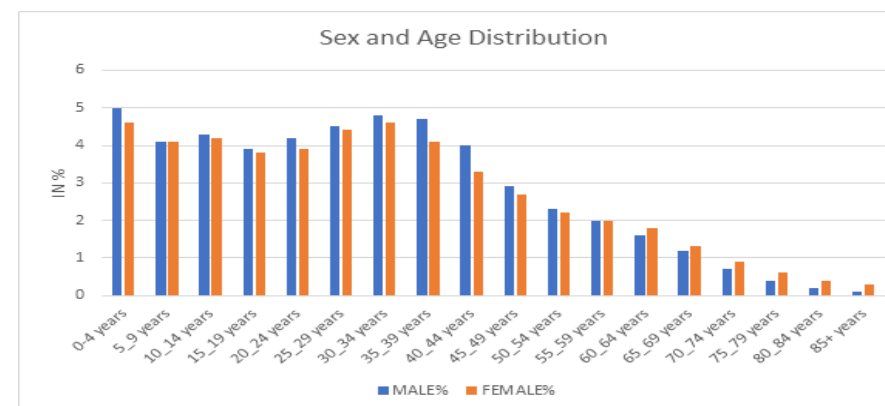
Figure 16: Sex Distribution



Source: Statistics South Africa, 2022

The sex distribution of BPDM in Figure 16, shows a representation of males and females. Males constitute 50.8% of the population, while females make up 49.2%. This highlights a slightly higher proportion of males, reflecting a stable and equitable gender distribution within the municipality. Figure 17, which shows the sex and age distribution graph reveals that the most dominant age group for both males and females is between 0 to 35 years, with the highest concentration in the 20-34 years range. This group makes up a significant proportion of the population, reflecting a youthful demographic. The elderly population, aged 65 years and older, is notably smaller, with each age category above 65 years contributing less than 2% of the total population. The middle-aged population (35-64 years) shows a steady decline as age increases.

Figure 17: Sex & Age Distribution



Source: Statistics South Africa, 2022



3.2.3 Age and Economic Dependency

According to Statistics South Africa (2022), the dependency ratio in Bojanala Platinum District Municipality (BPDM) stands at 47.6. This means that for every 100 individuals of working age (15–64 years), there are approximately 48 dependents—consisting of children aged 0–14 and elderly persons aged 65 and older.

While this figure already suggests a considerable socio-economic burden on the working-age population, the challenge is exacerbated by high unemployment levels, particularly among youth. In the broader North West province, youth unemployment remains critically high, with many individuals aged 15–34 neither employed nor in education or training. This weakens the effective labour force and reduces the capacity of households to support dependents, thereby intensifying financial pressure and limiting opportunities for upward mobility.

The combined effect of a high dependency ratio and limited employment absorption contributes to strained public resources in sectors such as education, healthcare, and social services. It also hampers the ability of households to invest in productive activities or escape intergenerational poverty. These conditions highlight the need for focused interventions aimed at improving labour market access, especially for youth, and expanding economic participation through

targeted skills development, job creation in emerging sectors, and support for informal enterprises.

In terms of poverty dynamics (figure 18), BPDM has experienced notable fluctuations over the past decade. Between 2012 and 2020, the number of people living in poverty steadily increased, reaching a peak of approximately 750,000 individuals or 41.2% of the district population in 2020. This trend coincided with national economic downturns, escalating unemployment rates, and weakened household income resilience, particularly in rural areas with limited economic diversification. Although poverty levels declined slightly to 735,000 in 2021 and 714,000 in 2022 (representing 38.2% of the population), this figure remains significantly higher than the 30.4% recorded in 2012, suggesting a partial and fragile recovery.

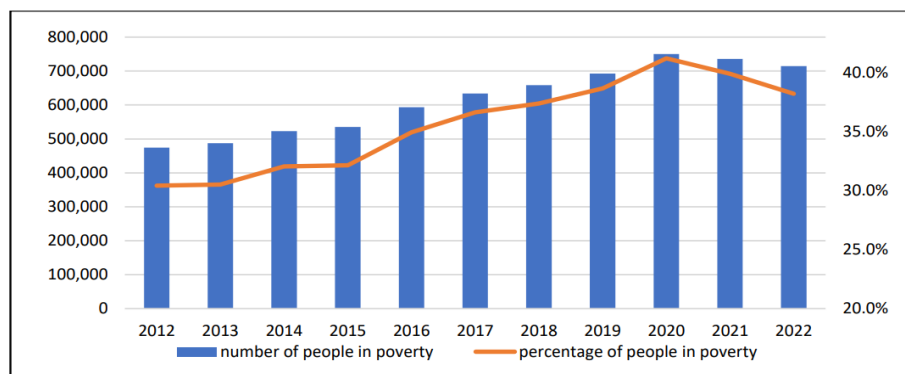
The most pronounced deterioration occurred between 2015 and 2020, during which the poverty rate rose sharply from 32.1% to 41.2%. This period also witnessed a contraction in mining-related employment, rising cost of living, and inadequate access to public services in certain parts of the district. These dynamics point to persistent structural challenges that extend beyond cyclical economic fluctuations.

Therefore, the data illustrates a sustained vulnerability among large segments of the population, particularly the working-age youth and



rural households, which calls for targeted and evidence-based interventions. These include promoting inclusive youth employment programmes and technical skills development to reduce long-term dependency ratios, prioritising spatial poverty hotspots for the rollout of basic services, social housing, and economic infrastructure, and strengthening local economic development (LED) strategies that leverage local resources to build sustainable livelihoods and reduce income insecurity.

Figure 18: Poverty Overview for BPDM 2012-2022



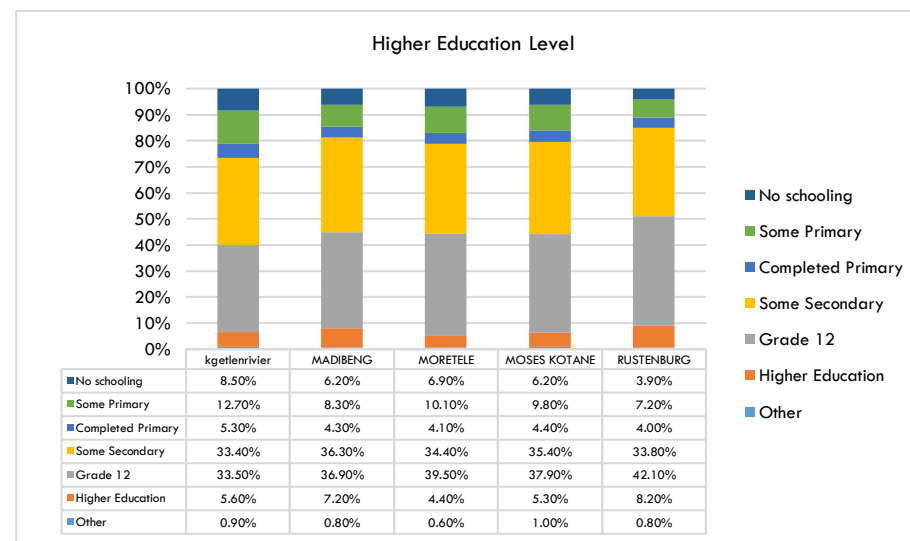
Source: SERO, 2024

3.2.4 Education

Figure 19 demonstrates the levels of education for all age groups according to the available data. The statistics reveal that 5.5% of the population has no schooling experience, reflecting a decrease in individuals without formal education. The proportion of people with

higher education is 6.9%, which, while small, indicates some level of access to tertiary education. The majority of the population has attended secondary school, with 34% having some secondary education and 39.2% completing Grade 12 (matric). Only 4.4% have completed primary school, and 8.5% have some primary education. These statistics suggest that a significant portion of the population possesses foundational education, with many completing secondary education. This indicates a solid potential for employability, as education forms the foundation for skills development and job opportunities. However, the relatively low percentage of individuals with higher education highlights a gap in advanced qualifications.

Figure 19: Highest Education Levels



Source: Statistics South Africa, 2022



In 2023, North West achieved an impressive 81.6% matric pass rate, placing the province fourth nationally. This represented a 1.8 percentage point improvement compared to the previous year. The BPDM recorded the highest pass rate in the province with 84.2%. In 2024, North West matriculants achieved a remarkable 87.5% pass rate, marking an increase of 5.9 percentage points from the previous year's results. This improvement places North West among the provinces with the most significant increases. Bojanala District once again led the province with a pass rate of 89.4%. Here is the ranking of North West districts based on their 2023 matric pass rates:

1. **Bojanala District – 89.4%**
2. **Dr Kenneth Kaunda District – 87.8%**
3. **Ngaka Modiri Molema District – 85.7%**
4. **Dr Ruth Segomotsi Mompati District – 84.7%**

1.2.5 Household Living Conditions

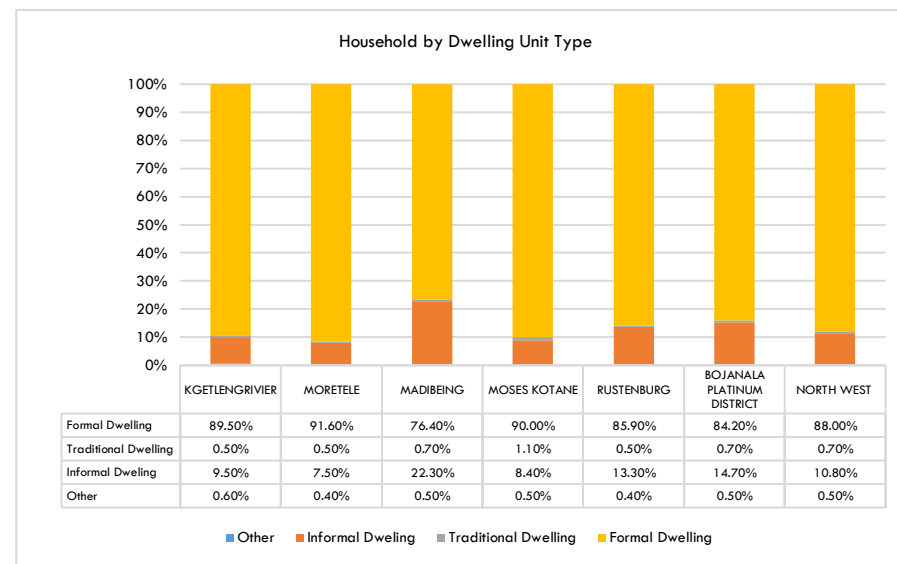
Table 7: Dwelling types

Dwelling types	Number of dwellings	Percentage
Formal dwelling	447 335	84.2%
Traditional dwelling	3 476	0.7%
Informal dwelling	78 262	14.7%
Other	2 418	0.5%

Source: Statistics South Africa, 2022

The types of dwellings commonly found in the BPDM are the formal and informal dwellings. Traditional dwellings are not common in the municipality, they only make up 0.7% of the dwellings in the municipality. Most households located within villages under the BPDM have formal dwellings in the form of houses that people built themselves as well as RDP houses provided for them by the government and other types of social housing. About 447 335 households, which is 84.2% of the total households have formal housing. There are also informal dwellings in vacant municipal lands. Informal dwellings in the municipality make up 14.7% of the total dwellings.

Figure 20: Household Dwelling Unit Type

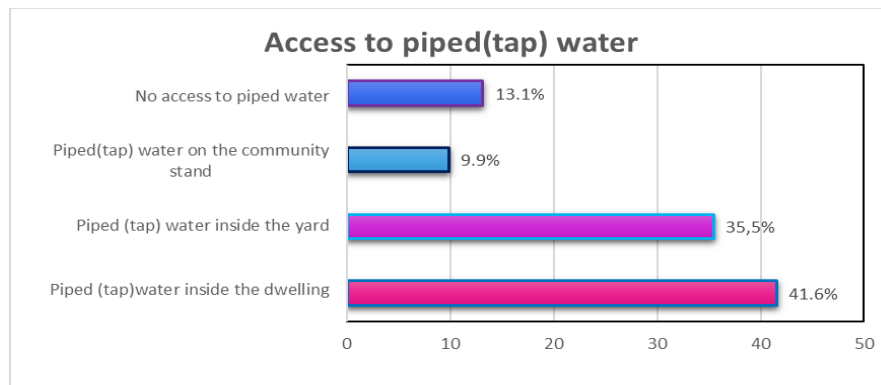


Source: Statistics South Africa, 2022



3.2.5.1 Access to piped (tap) water

Figure 21: Access to piped (tap) water

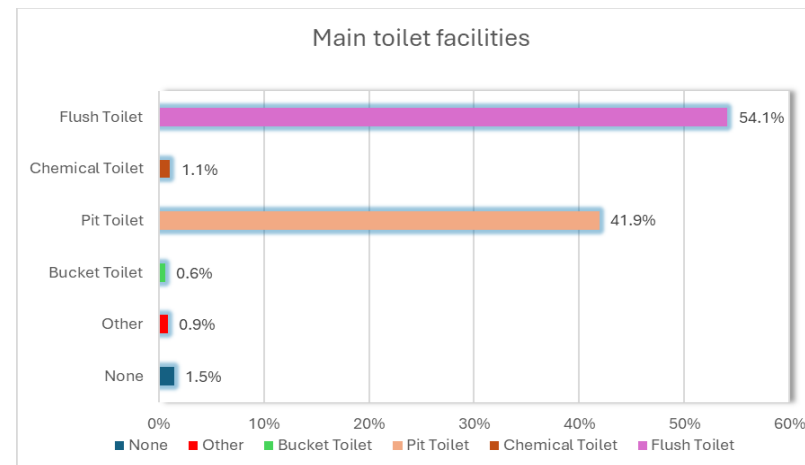


Source: Statistics South Africa, 2022

Statistics show that there is still a challenge of water supply in BPDM. There is over 13% of households within the municipality which do not have access to pipe or tap water. This means such households must depend on borehole water or any other sources. 41.6% of the population have tap water inside the dwelling and 35.3% depends on the pipe water in their yard. Although the number of households with access to pipe/tap water in the municipality is significantly high, the supply of water in those taps is not consistent. There is also over 9.9 % of the households that depend on tap water from the community stands which clearly demonstrates the challenge of water supply in the municipality.

3.2.5.2 Main toilet facilities

Figure 22: Main toilet facilities



Source: Statistics South Africa, 2022

In BPDM the majority of households which constitute 54.1% are dependent on flush toilet as their main toilet facility which shows that there is proper sanitation in the municipal area. 41.9% of the households in the municipality depend on pit latrine. Other types of toilet systems such as chemical toilets only make up less than 5% of households' facilities.



3.2.5.3 Refuse Removal/Disposal

Table 8: BPDM Refuse removal/disposal

Refuse disposal method	Household counts	Percentage %
Removed by local authority at least once a week	305 379	57,5%
Removed by local authority less often	8 746	1,6%
Communal refuse dump	8 588	1,6%
Communal container/central collection point	35 226	6,6%
Own refuse dump	144 955	27,3%
No Rubbish Disposal	22 211	4,2%
Other	6 387	1,2%

Source: Statistics South Africa, 2022

Refuse removal and disposal is one of the responsibilities of the local municipality. The table above shows that there is a great increase on the refuse removal and disposal by the municipality, as 57.5% of the household have their refuse collected by the municipality once a week and only 27.3% of the households do not have access to such service, thus they depend on their own refuse dump. 4.2% of the households do not have any form of refuse disposal which leads to illegal dumping.

3.2.5.4. Source of energy

Electricity is the main source of energy for many households in Bojanala District Municipality. While some households rely on alternative sources of energy for cooking, lighting, and heating, the provision of electricity remains essential in the municipality.

Table 9: Energy for Lightning

Energy sources	Household counts	Percentage%
Electricity	500 067	94,1%
Gas	975	0,2%
Paraffin	5 037	0,9%
Candles	21 206	4,0%
solar	2 033	0,4%
Other	992	0,2%
None	1 181	0,2%

Source: Statistics South Africa, 2022

There is adequate coverage on the supply of electricity in BPDM. A large percentage of households, over 94,1%, use electricity as their primary source of energy for lighting. Only a small portion, approximately 0,4%, relies on candles for lighting, demonstrating the municipality's strong dependence on electricity for household energy needs.



Table 10: Energy for cooking

Energy sources	Households counts	Percentage%
Electricity from mains	371 541	69,9%
Gas	120 138	22,6%
Paraffin	19 971	3,8%
Wood	17 448	3,3%
Coal	126	0,0%
Animal dung	39	0,0%
Solar	295	0,1%
Other	646	0,1%
None	1 289	0,2%

Source: Statistics South Africa, 2022

Many households in Bojanala District Municipality rely on various sources of energy. The majority, over 69,9%, use electricity as their primary source of energy for cooking. A significant portion of households also depend on gas and wood for cooking. This could be attributed to the high cost of electricity and the availability of wood in many villages within the municipality.

3.2.6 Crime Statistics

According to the Police Recorded Crime Statistics for 2023/2024, Rustenburg Police Station ranks first in the province and tenth in South Africa for community-reported serious crimes, with a total of 7,129 cases. This represents a decrease of 370 cases compared to the

2022/2023 reporting period. In terms of specific crimes, Rustenburg Police Station ranks first in the province and 29th nationally for common robbery, with 245 reported cases, an increase of 26 cases. For robbery at non-residential places, Rustenburg ranks first in the province and 6th in the country, with 129 cases, marking an increase of 19 cases. Property-related crimes also place Rustenburg first in the province and 7th nationally, with 1,959 reported cases, a decrease of 500 cases.

Burglary at residential premises ranks second in the province and 12th in the country, with 643 cases, a decrease of 39 cases. For burglary at non-residential premises, Rustenburg ranks first in the province and 4th in the country, with 393 cases, down by 179. The theft of motor vehicles and motorcycles is also the highest in the province and 19th nationally, with 310 cases, a decrease of 42 cases. Other serious crimes rank first in the province and 8th nationally, with 2,798 cases, an increase of 76 cases. Boitekong Police Station, located within the Rustenburg Local Municipality, leads the province in sexual offences and rape, ranking 23rd and 25th in the country with 186 reported cases of sexual offences and 153 cases of rape. There has been an increase of 24 cases for sexual offences and 17 cases for rape compared to the previous period. Regarding assault with intent to cause grievous bodily harm (Assault GBH), Boitekong Police Station



ranks first in the province and 5th nationally, with 818 reported cases, an increase of 108 cases from the previous year. Lastly, for arson, Boitekong ranks second in the province and 14th nationally, with 17 cases, reflecting an increase of 8 cases. Mogwase Police Station ranks third in the province and 28th nationally for arson cases, with a total of 14 reported incidents.

3.2.7 Social Amenities

The district is equipped with various social amenities, including healthcare, law enforcement, and educational facilities. In terms of education, the district has a total of 542 learning facilities (refer to map 6). There are 129 healthcare facilities within the BPDM, with clinics being the most prevalent, particularly in the MKLM (refer to map 7). The district is served by four district hospitals, located in four out of the five local municipalities, with MLM being the only municipality without one and thus may experience more challenges on access to major health care provisions as people may need to travel to neighbouring municipalities to access District hospital health care facilities. The BPDM is also home to 26 police stations, with Madibeng having the largest number, pressure on the need for Police Station services may be experienced on the northern portions of the Moses Kotane Local Municipality as there is no Police Station in the northern villages such as Motlhabe and Nkogolwe (refer to map 8).

Table 11: Social Amenities Provision Guidelines

FACILITY	ACCESS DISTANCE	POPULATION THRESHOLD
CRECHE	2 km radius	2400 – 3000 people
PRIMARY SCHOOL	5 – 10 km radius	1000 – 7000 people
SECONDARY SCHOOL	5 – 10 km radius	2500 – 12500 people
DISTRICT HOSPITAL	30 km radius	300 000 – 900 000 people
COMMUNITY HEALTH CENTRE	5 km radius	60 000 – 140 000 people
PRIMARY HEALTH CLINIC	5 km radius	5000 – 70 000 people
POLICE STATION	8 km radius	60 000 – 100 000 people
LIBRARY	8 – 10 km radius (local)	5000 – 70 000 people
	15 km radius (regional)	200 000 people
	50 km radius (regional reference)	450 000 people
COMMUNITY HALL	10 – 25 km radius	10 000 – 60 000 people
CEMETERY	15 – 30 km radius (medium)	8.8 ha/50 000 people
	30 km radius (large)	17.2 ha/100 000 people
THUSONG CENTRE	15 – 25 km radius	1 per LM
ICT ACCESS POINTS	5 km radius	10 000+ people

Source: CSIR Guidelines for the Provision of Social Facilities in South African Settlements 2012

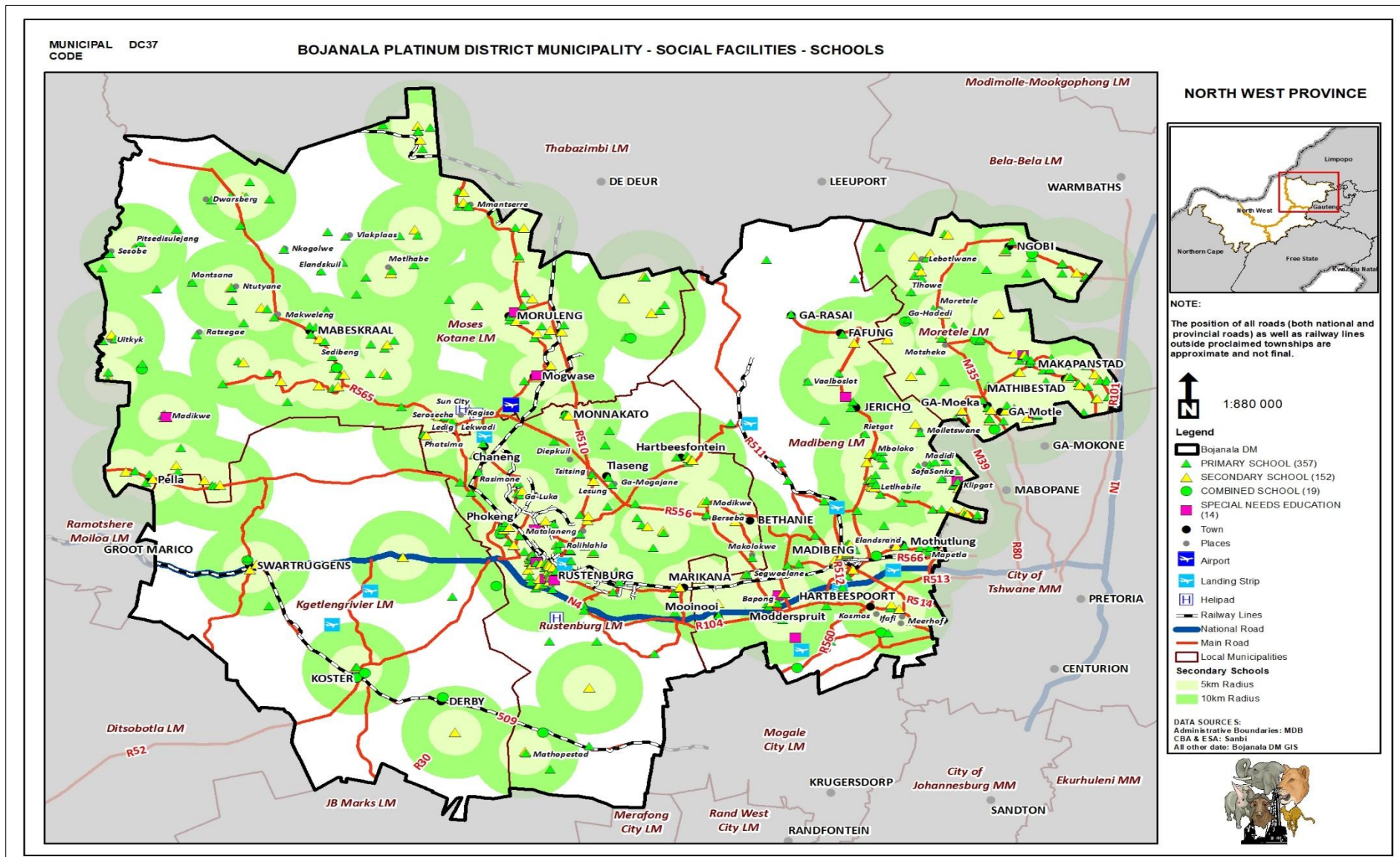


The BPDM generally meets the guidelines for primary schools, secondary schools, clinics, community health centres, district hospitals, and police stations, but there are notable gaps in certain municipalities. Primary Schools are adequately distributed across the district, though KRLM (with only 11 primary schools for a population of 54,759) may face accessibility issues. Similarly, secondary schools are well-provided in most municipalities, except KRLM, which has only 3 secondary schools. The KRLM and MLM are underserved in terms of community health centres, and the MLM lacks a district hospital, leaving its population of 219,120 without direct access to specialised medical care. In contrast, the KRLM, RLM, MKLM and MDLM are better served with district hospitals and community health centres.

Clinics are generally sufficient, though KRLM (with only 4 clinics) may have challenges in ensuring that the population is within the 5 km radius requirement. Police stations are relatively well-distributed, but KRLM and MLM have fewer stations, which could result in underserved areas, particularly in remote regions. In summary, the MLM and KRLM need more infrastructure, especially in healthcare and law enforcement, to meet the district's guidelines. The other municipalities like the RLM and MDLM, are better equipped but may still need minor improvements in rural areas.

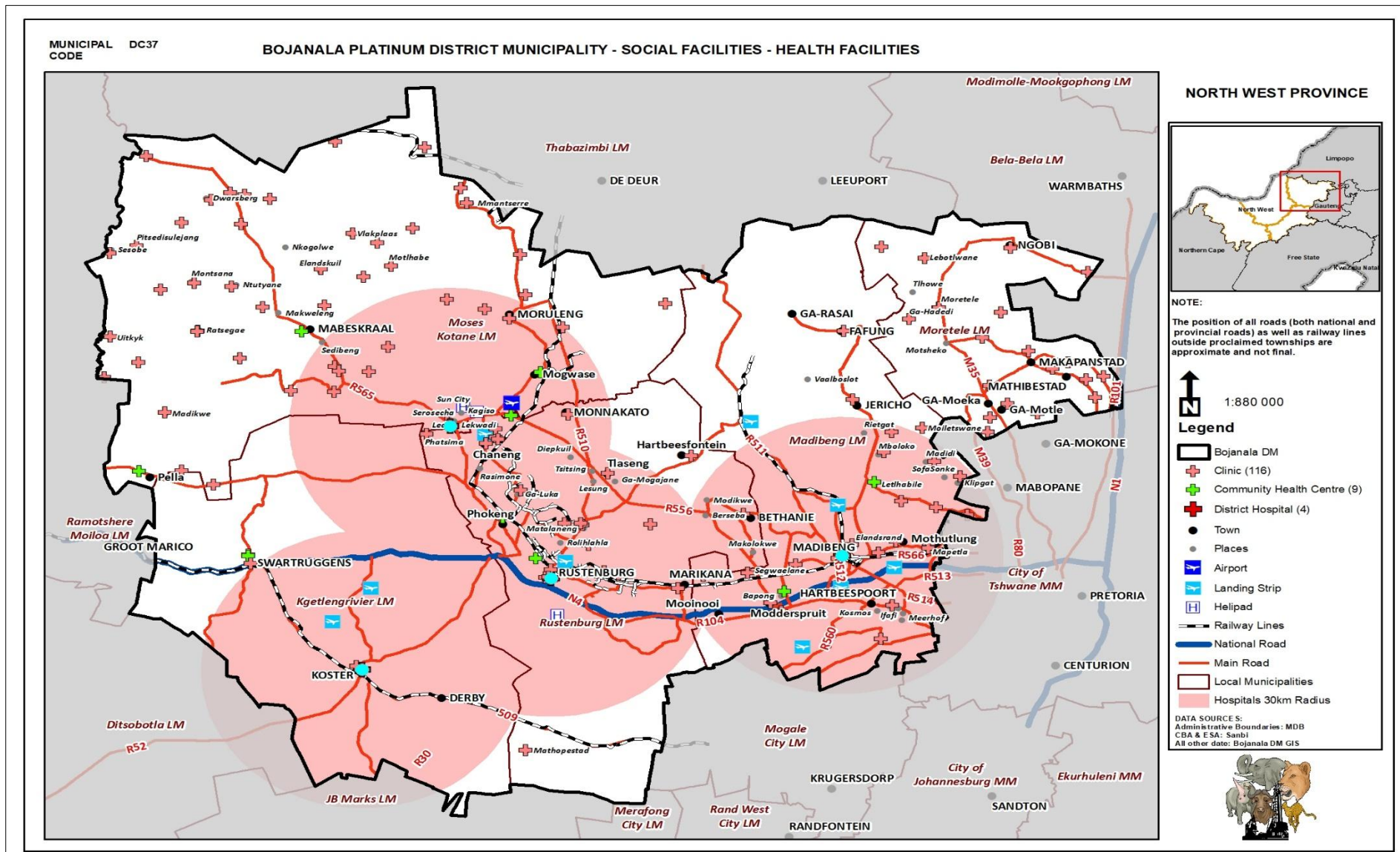


Map 6: Schools within the BPD



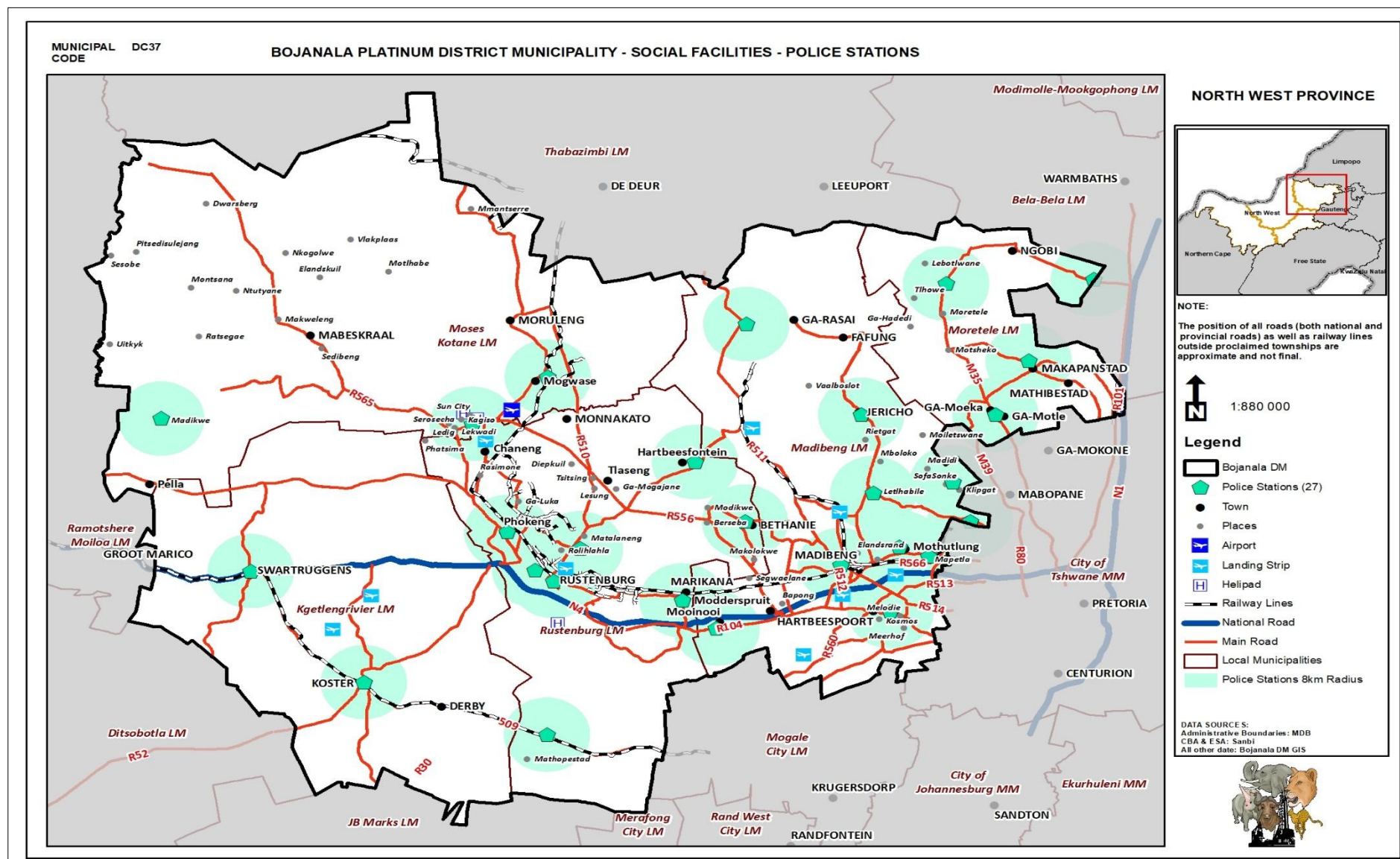


Map 7: Health Facilities within the BPDM





Map 8: Police Stations within the BPDM





3.2.8 Human Settlements

According to Statistics SA (2022), South Africa generally has predominant household living conditions characterized by formal dwellings, which make up 88.5% of the households. This is followed by a significant number of households living in informal dwellings, comprising 8.1% of the total number of households. Additionally, 3.1% of the households are living in traditional dwelling types.

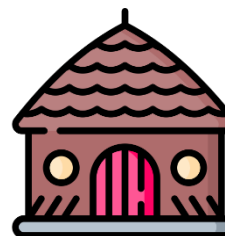
BOJANALA PLATINUM DISTRICT HOUSEHOLD DWELLING TYPES



FORMAL DWELLING: 84,2%



INFORMAL DWELLING: 14,7%



TRADITIONAL DWELLING: 0.5%



OTHER DWELLING: 0.6%



TRADITIONAL DWELLING: 0.7%



OTHER DWELLING: 0.5%



FORMAL DWELLING: 76,4%



INFORMAL DWELLING: 22,3%

BREAKDOWN PER LOCAL MUNICIPALITIES

KGETLENGRIVIER LOCAL MUNICIPALITY



FORMAL DWELLING: 89,5%

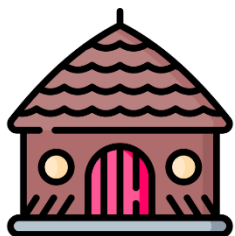


INFORMAL DWELLING: 9,5%

MADIBENG LOCAL MUNICIPALITY



MOSES KOTANE LOCAL MUNICIPALITY



TRADITIONAL DWELLING: 0.7%



OTHER DWELLING: 0.5%



FORMAL DWELLING: 90,0%



INFORMAL DWELLING: 8,4%

MORETELE LOCAL MUNICIPALITY



FORMAL DWELLING: 91,6%



INFORMAL DWELLING: 7,5%

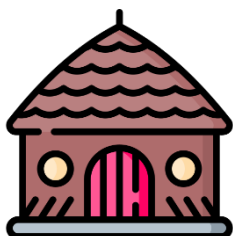


TRADITIONAL DWELLING: 1.1%



OTHER DWELLING: 0.5%

RUSTENBURG LOCAL MUNICIPALITY



TRADITIONAL DWELLING: 0.5%



OTHER DWELLING: 0.4%



FORMAL DWELLING: 85,9%



INFORMAL DWELLING: 13,3%



TRADITIONAL DWELLING: 0.5%



OTHER DWELLING: 0.4%

The recent Census 2022 data on dwelling types within the BPDM local municipalities reveal a significant presence of informal settlements, highlighting an ongoing demand for housing and the need for sustained efforts to provide affordable and adequate housing solutions. However, compared to Census 2011, BPDM has seen substantial growth in formal housing, reflecting a positive trajectory in housing development. Despite this progress, certain local municipalities, such as Madibeng and Rustenburg, still require further housing improvements and targeted interventions.

3.2.9 Economic Considerations

According to the BPDM 2024/2025 Reviewed IDP, enhancing economic growth and basic service delivery relies on identifying high-capacity sectors in both public and private spaces that can scale employment. Despite significant government spending, BPDM confronts South Africa's triple challenge of unemployment, poverty, and

inequality. Its strategic borders with Waterberg (Limpopo), Tshwane and West Rand (Gauteng), as well as inter-district ties within the province, offer vital corridors for investment attraction. Targeted studies are recommended to spotlight growth sectors and draw external consumers, thus generating multiplier effects and expanding job opportunities.

Challenges identified by the Economic Positioning Work stream that impact negatively on the economic development are stated below:

- High level of unemployment
- High poverty levels
- Inequality mainly amongst the youth, women and people with disability
- Inability to tap into the main economic sectors of the district
- High influx of migrant labourers
- Unfavourable geographic settings and high population density in some local municipalities
- There is limited integration between municipalities, communities, mining houses, traditional leadership and other stakeholders
- Poor road infrastructure
- Constant shortage of energy supply

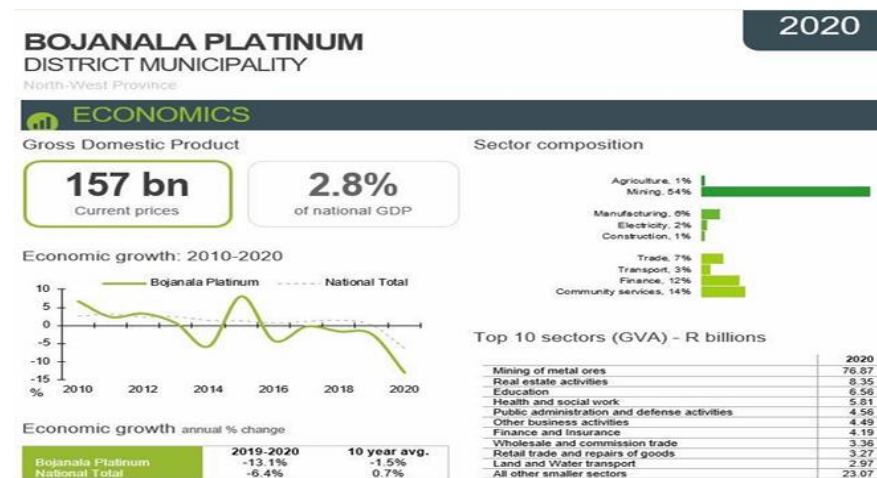


- Shortage of water supply

Identified Improvement measures:

- Formation of responsive and efficient structures to drive the economic agenda
- Plans to unlock the economic potential of the region.
- Identify skills gaps that exist within the municipalities in order to capacitate municipal officials to play their roles efficiency and effectively
- Identify and explore opportunities for collaboration between the public and private sector, communities and other developmental partners within the mining, tourism and agricultural sectors
- Explore opportunities for on-going support and knowledge sharing with all relevant stakeholders

Figure 23: Bojanala Platinum District Municipality Economic Summary Statistics.



Source: BPDM 2024/2025 Reviewed IDP

3.2.9.1 BPDM Economic Sectors

Economic sectors are divisions of a country's economy based on the type of activity or work being performed. The average annual growth of the broad economic sectors shows output that represents the percentage change in gross domestic product by region (GDP-R) at constant price, from one year to the next. Gross domestic product by region (GDP-R) represents the value of all goods and services produced within a region, over a period of one year, plus taxes and minus subsidies. The Bojanala Platinum District Municipality's economy is made up of various industries. The gross value added by region variable provides a sector breakdown, where each sector is measured in terms of its value added produced in the local economy.

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



Table 12: Bojanala Platinum's Average annual growth for Broad Economic Sectors (% , Constant 2015 prices)

SECTOR	2012	2017	2020	2021
Agriculture	6.6%	19.9%	6.3%	0.8%
Mining	-4.2%	2.8%	-15.9%	18.5%
Manufacturing	5.3%	-2.3%	-16.9%	7.6%
Electricity	1.0%	-3.5%	-7.8%	-2.1%
Construction	8.1%	-8.9%	-21.9%	-7.8%
Trade	8.3%	-3.8%	-17.6%	1.6%
Transport	7.9%	-2.8%	-18.9%	-1.2%
Finance	7.8%	-1.0%	-5.0%	-1.1%
Community Services	9.7%	-1.7%	-6.1%	-2.6%

Source: IHS Markit – S&P Global, (2022)

Average annual growth for broad economic sectors in Bojanala Platinum District Municipality shows that the agriculture industry had the highest growth at 6.3% in 2020, subsequent to that it decreased to 0.8% in 2021. Mining Industry had the largest average annual growth at 18.5% in 2021. Most industries had recorded negative average annual growth in 2020 with the construction industry having the highest growth at 21.9% compared to other industries for the same period.

The mining industry was the largest in 2021 within Bojanala Platinum District Municipality accounting for 18.5% of the total GVA in the

district municipality's economy. The industry that contributed the second most to the GVA of the Bojanala Platinum District Municipality was the manufacturing industry at 7.6%, followed by trade industry at 1.6% for the 2021 period. The industry that contributed the least to the economy of Bojanala Platinum District Municipality was the construction industry, with a contribution of -7.8 % of the total GVA

a) Primary Sector

The primary sector consist of two broad economic sectors namely the mining and the agricultural sector. Gross Value Added (GVA) is a measure of output (Total production) of a region in terms of the value that was created within the region. The primary sector of the economy refers to activities focused on the extraction, collection, and harvesting of natural resources. The primary sector contributes the most to the Gross Value Added within the Bojanala Platinum District Municipality at 62%.

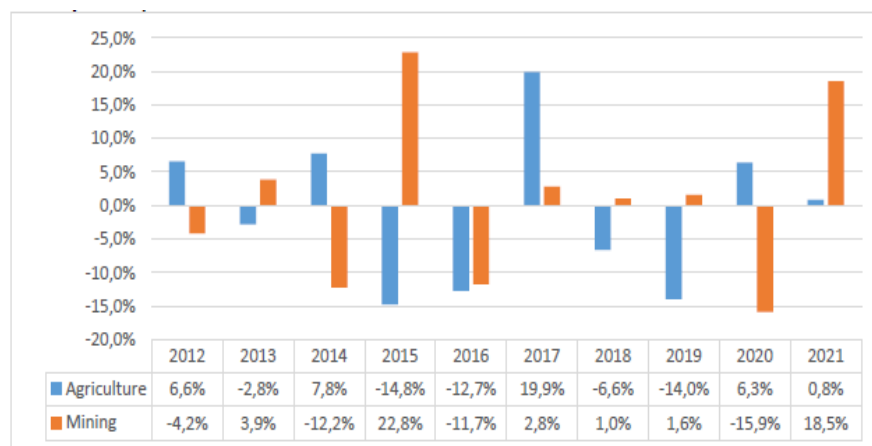
The primary sector consists of two broad economic sectors:

- Mining sector
- Agricultural sector

The chart below represents the average growth rate in GVA for both the Mining and the agricultural sector in BPDM from 2016 to 2021.



Figure 24: BPDM Primary Sector Average Annual Growth (Constant 2015 prices), 2012-2021



Source: HIS Markit-S&P Global, (2022)

Between 2012 and 2021, the mining sector recorded its highest positive growth in 2021, with an average growth rate of 18.5%. Its peak growth was in 2015, reaching 22.8%. In contrast, the agricultural sector experienced its lowest growth during the same period in 2015, with a decline of 14.8%. The mining sector also faced its most significant contraction in 2020, with a negative growth rate of 15.95%. Despite past fluctuations, both the mining and agricultural sectors saw growth in 2021, with agriculture showing a modest increase of 0.8%. The economy of the Bojanala Platinum District

Municipality has traditionally been anchored in the primary sectors, benefiting from its rich mineral resources.

b) Secondary Sector

The secondary sector of the economy involves manufacturing and industrial activities that process raw materials from the primary sector into finished goods or intermediate products. This sector transforms natural resources into products that are either ready for consumption or used in further production. The Secondary Sector contributes at least 8% of the Gross Value Added within the Bojanala Platinum District Municipality.

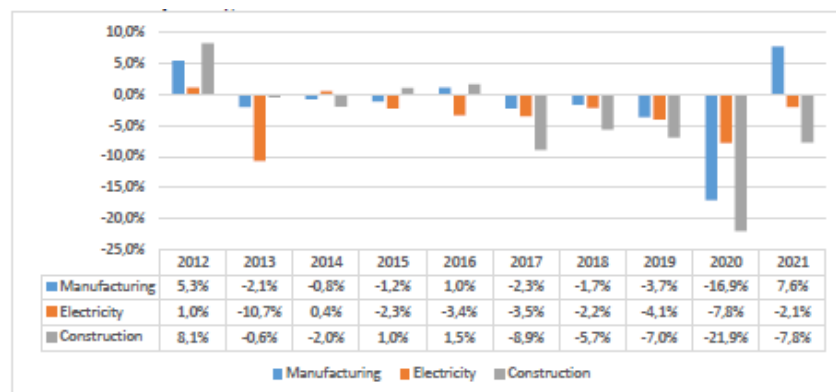
The secondary sector consists of three broad economic sectors namely:

- Manufacturing sector
- Electricity sector
- Construction sector

The graph below represents the average growth rates in the GVA for these sectors in BPDM from 2012 to 2021



Figure 25: BPDM Secondary Sector Average Annual Growth (Constant 2015 prices), 2012-2021



Source: HIS Markit-S&P Global, (2022)

Between 2012 and 2021, the manufacturing sector achieved its highest growth in 2021, with a rate of 7.6%. The construction sector recorded its peak growth earlier, at 8.1% in 2012. Both sectors experienced their lowest growth in 2020, with manufacturing declining by 16.9% and construction by 21.9%. The electricity sector saw its highest growth in 2012 at 1.0%, but recorded its lowest performance in 2013 with a contraction of 10.7%.

c) Tertiary sector

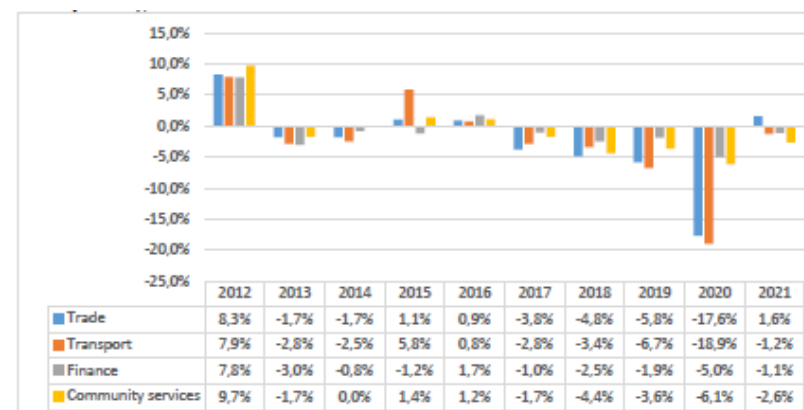
The tertiary sector is the economic sector that provides services to individuals and businesses. The tertiary sector contributes the second most to the Gross Value Added within the Bojanala Platinum District Municipality at 30%.

The tertiary sector consists four broad economic sectors:

- Trade
- Transport
- Finance
- Community services

The chart below represents the average growth retails in the GVA for these sectors in BPDM from 2012 to 2022.

Figure 26: BPDM Tertiary Sector Average Annual Growth (Constant 2015 prices), 2012-2021



Source: HIS Markit-S&P Global, (2022)

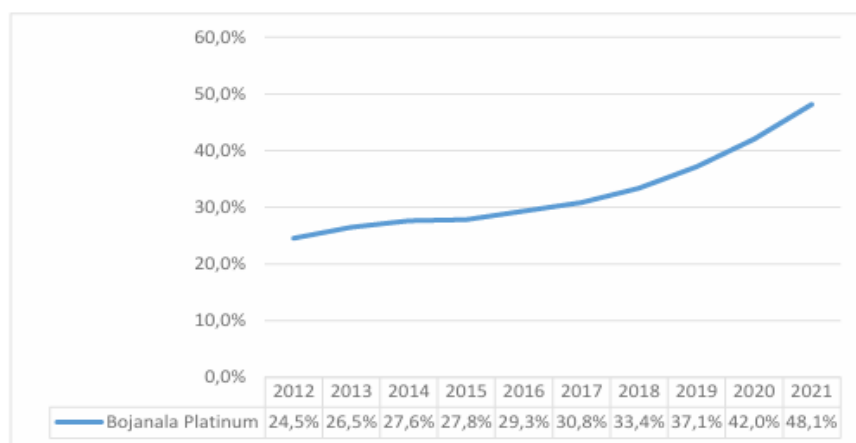
The trade sector recorded its highest positive growth in 2021, with a rate of 1.6%, while all other tertiary sectors experienced a decline that year. The transport sector reached its peak growth in 2012 at 7.9%.



7.9%. Similarly, the finance sector saw its highest growth in 2012 at 7.8% and its lowest in 2020, with a decline of 5.0%. The community services sector, which primarily includes government-related activities, experienced its highest growth in 2012 at 9.7% and its lowest at -6.1% in 2020. Notably, the trade sector recorded its most significant contraction in 2020, with a sharp decline of 17.6%.

3.2.9.2 Unemployment within the BPDM

Figure 27: Unemployment Rate for Bojanala Platinum District Municipality, 2012-2021



Source: IHS Markit – S&P Global, (2022)

According to Statistics South Africa, the labour force comprises all persons who are employed, plus all persons who are unemployed. Discouraged work-seeker is a person who was not employed during

the reference period, wanted to work, was available to work/start a business but did not take active steps to find work during the last four weeks, provided that the main reason given for not seeking work was any of the following: no jobs available in the area; unable to find work requiring his/her skills; lost hope of finding any kind of work.

Table 13: Unemployment Rate for Bojanala Platinum Local Municipalities, 2012, 2017,

Local Municipalities	2012	2017	2020	2021
Moretele	41.7%	41.7%	44.3%	47.7%
Madibeng	25.1%	27.1%	34.0%	38.5%
Rustenburg	19.6%	31.2%	48.6%	56.6%
Kgetleng Rivier	15.1%	21.7%	34.5%	41.7%
Moses Kotane	31.9%	35.4%	42.6%	48.1%

Source: IHS Markit – S&P Global, (2022)

All the local municipalities recorded an increase in unemployment between 2012 and 2021. Rustenburg Local municipality had the highest unemployment rate at 56.6% in 2021. Moses Kotane had the second highest unemployment rate at 48.1% for the period under review. The local municipality with the lowest unemployment rate was Madibeng at 38.5% in 2021. All the local municipalities had the highest unemployment in 2021 compared to other years shown in the table above.



Table 14: Total Formal Employment per Broad Economic Sector for Bojanala Platinum

Sector	Bojanala Platinum	Total North West
Agriculture	7 963	52 857
Mining	106 319	122 940
Manufacturing	14 385	36 466
Electricity	1 302	3 573
Construction	10 592	30 169
Trade	35 262	109 540
Transport	3 172	10 389
Finance	25 086	80 273
Community services	43 499	182 252
Households	24 915	60 127
Total	272 495	688 584

Source: IHS Markit – S&P Global, (2022)

BPDM employs a total number of 272 495 people within its district municipality. In Bojanala Platinum District Municipality, the economic sectors that recorded the largest number of employment in 2021 were mining sector with a total of 106 319 employed people in the district municipality. The community services sector with a total of 43 499 employs the second highest number of people relative to the rest of the sectors. The electricity sector with 1 302 is the sector that employs

the least number of people in Bojanala Platinum District Municipality, followed by transport sector with 3 172 people employed.

Table 15: Total number of Informal Employment for Bojanala Platinum and its Local Municipality, 2021

Industry	BPDM	MLM	MDLM	RLM	KRLM	MKLM
Manufacturing	3.005	239	881	1,216	289	381
Construction	6.437	476	2,124	2,728	330	779
Trade	18.805	1,430	6,492	7,412	1,188	2,282
Transport	4.115	274	1,409	1,678	218	535
Finance	2.190	115	737	1,027	107	204
Community Services	8.071	602	3,604	2,709	280	876
Total Informal Sector	42.623	3,137	15,246	16,771	2,412	5,057

Source: IHS Markit – S&P Global, (2022)

The industry that had the largest number of employed people in Bojanala Platinum District Municipality and most local municipalities was trade in 2021 followed by community services. Moretele and Kgetlengrivier Local Municipalities employed the least number of people in all industries compared to other local municipalities for the period under review.

d) Tourism

Tourism is the activity of traveling to and staying in places outside one's usual environment for leisure, business, or other purposes for a limited time. According to IHS Markit (2022), tourism is the non-commercial



organisation plus operation of vacations and visits to a place of interest.

Tourism contributes to the development of commercial organisations and the operation of holidays as a tool to improve the economy. Particularly tourism could make a substantial contribution to the well-being and prosperity of residents. Bojanala Platinum District Municipality Platinum District has many tourist attraction destinations.

Table 16: Number of Trips by Purpose for BPDM, 2011 -2022

	Leisure / Holiday	Business	Visits to friends and relatives	Other (Medical, Religious, etc)	Total
2011	419 031	128 555	898 176	111 376	1 557 139
2012	393 793	133 669	885 013	109 969	1 522 444
2013	356 149	128 904	891 754	102 078	1 478 885
2014	321 967	114 274	921 037	93 081	1 450 359
2015	298 455	102 518	896 721	81 720	1 379 415
2016	309 251	101 616	909 960	79 659	1 400 486
2017	359 616	90 366	899 443	74 785	1 424 210
2018	421 159	83 230	875 042	64 596	1 444 028
2019	510 435	86 095	806 233	59 471	1 462 235
2020	365 287	46 687	329 904	23 566	765 444
2021	405 104	69 437	317 807	30 645	822 993
Average Annual growth					
2011-2021	-2.80%	-11.25%	-5.51%	-11.60%	-5.96%

Source: HIS Markit-S&P Global, (2022)

Table 17: Total Spending as % share of GDP-BPDM, North-West and National Total, 20-2021

	Bojanala Platinum	North-West	National Total
2011	6.2%	5.0%	5.2%
2012	6.4%	5.4%	5.8%
2013	6.5%	5.1%	5.4%
2014	6.7%	5.2%	5.6%
2015	5.7%	4.5%	5.0%
2016	5.8%	4.6%	5.2%
2017	5.2%	4.0%	4.5%
2018	5.4%	4.2%	4.6%
2019	7.2%	5.7%	6.2%
2020	2.4%	2.1%	2.7%
2021	4.8%	4.0%	4.7%

Source: HIS Markit-S&P Global, (2022)

In BPDM the tourism spending as a percentage of GDP in 2021 was 4.8%. In North-West Province tourism spending as a percentage of GDP for 2021 was 4.0% and 4.7% in South Africa for the same period. The highest tourism spending in BPDM was recorded in 2019 at 7.2%, and it declined severely in 2020 at 2.4%.



3.2.10 Development Indicators

Table 18: Development Indicators

INDICATOR	VALUE
Human Development Index (HDI)	0.66
Life Expectancy at birth	63.0
Expected years of schooling	13.4
Mean years of schooling	8.6
GNI Per Capita	15 487
Gini Coefficient	0.695

Source: Quantec 2023

The development indicators for the BPDM reveal a moderate level of human development. With a HDI of 0.66, the district is positioned in the middle development range, indicating that there is room for improvement in health, education, and economic growth. The life expectancy at birth is 63 years, which reflects reasonable healthcare access but highlights the need for further improvements in healthcare services to reduce preventable diseases and increase longevity. The expected years of schooling stand at 13.4, suggesting that the younger population has access to a relatively high level of education, approaching the equivalent of high school and some post-secondary education.

However, the mean years of schooling for adults is lower at 8.6 years, indicating that many adults have not pursued education beyond high

school, limiting their access to better job opportunities. The GNI per capita of 15,487 reflects a moderate-income level, pointing to economic challenges and potential income disparities within the district. These indicators suggest that while the BPDM has made progress in education and health, there is a need for focused efforts to improve healthcare, adult education and economic opportunities to enhance the overall well-being and development of its population. A Gini coefficient of 0.695 indicates high income inequality, with a significant gap between the wealthy and the rest of the population. This suggests the need for policies focused on reducing poverty and promoting more equitable economic growth to address these disparities.

3.2.11 Pressure Points – Social and Economic Infrastructure

The Bojanala Platinum District Municipality continues to experience complex socio-economic dynamics driven by population growth, uneven service delivery and high levels of poverty and inequality. This section outlines the critical social and economic infrastructure pressure points facing the district, identifies priority intervention areas and proposes spatial responses for planning and investment prioritisation.



Social Infrastructure Pressure Points

- **Inadequate Access to Healthcare Facilities**

Despite the presence of four district hospitals and 129 clinics across BPDM, significant gaps persist in equitable access to healthcare services. Notably, MLM lacks a district hospital, leaving its population of over 219,000 people without direct access to specialised healthcare services. KRLM, with a population of 54,759, only has four clinics, which is well below the CSIR's 5 km access threshold.

Table 19: Health Facility Gaps

Municipality	Population	No. of Clinics	District Hospital Present	Gap Description
MLM	219,120	Unknown	None	No district hospital
KRLM	54,759	4	1	Insufficient clinics
MKLM	265,668	Adequate	1	Moderate coverage

- **Educational Infrastructure Deficits**

Education indicators show notable differences. While BPDM's matric pass rate is high (89.4% in 2024), access to basic and higher education remains unequal. KRLM has only 11 primary and 3 secondary schools, failing to meet the CSIR population thresholds (1 primary per 2,400–3,000 people, 1 secondary per 2,500–12,500 people).

Table 20: Educational Pressure Points

Municipality	Population	Primary Schools	Secondary Schools	Pressure Point
KRLM	54,759	11	3	Underserved in both tiers
MLM	219,120	Moderate	Moderate	Lacking tertiary access
RLM	562,031	High	High	No major pressure

- **Sanitation and Water Provision Constraints**

Access to basic services such as piped water and sanitation remains uneven. Only 41.6% of BPDM households have piped water inside their homes, and 13% have no access at all. In MLM, only 21.1% of households have piped water access far below the district average. Pit latrines are still used by 41.9% of households.

Table 21: Basic Services Deficits

Municipality	Piped Water Access	Flush Toilets	Pit Latrines	Notable Issue
Moretele	21.1%	18.9%	70%+	Critical shortage
Madibeng	39.4%	51.2%	Moderate	Urban-rural divide
Rustenburg	53.0%	88.6%	Low	Relatively well served

- **Solid Waste Management and Illegal Dumping**

Refuse removal services are available to only 57.5% of households. Over 27.3% rely on private dumps, and 4.2% have no disposal,



leading to illegal dumping. The pressure is highest in rural and informal areas within MDLM, KRLM, and MLM.

- **Crime and Safety**

Rustenburg is ranked among the top ten SAPS stations nationally for community-reported crimes, including robbery, property crime, and vehicle theft. Boitekong leads in sexual offences and GBH. Low police presence in KRLM and MLM exacerbates vulnerability in rural areas.

Economic Infrastructure Pressure Points

- **Persistent Poverty and Inequality**

Poverty in BPDM rose sharply between 2015 and 2020, peaking at 41.2% and remaining high at 38.2% in 2022. The Gini coefficient of 0.695 reflects severe inequality. The dependency ratio is 47.6, meaning every 100 working adults support nearly 48 dependents.

Table 22: Socioeconomic Vulnerability

Indicator	Value
Poverty Rate (2022)	38.2%
Gini Coefficient	0.695
Unemployment Rate	High (est. 35–40%)
Dependency Ratio	47.6

- **Overreliance on the Mining Sector**

Mining employs over 113,000 people, over 50% of the workforce, especially in Rustenburg and Madibeng. However, this creates vulnerability to price shocks, labour unrest, and illegal mining.

Pressure Areas:

- Illegal chrome mining hotspots in Madibeng and Marikana
- Lack of value-chain development (manufacturing, beneficiation)
- Import leakages of mining inputs

- **Underutilisation of Agricultural and Tourism Potential**

While 19% of land is used for agriculture, it only contributes 2.6% to GDP. There's an overreliance on subsistence farming in MLM and MDLM. Tourism attractions like Sun City and Pilanesberg are not fully integrated into local economic development.

- **Spatial Inequality in Infrastructure Investment**

Access to electricity for lighting is high (94.1%), but only 69.9% use it for cooking—highlighting cost and affordability issues. Broadband and public transport infrastructure are lagging in rural areas, affecting job accessibility.



3.3 BIOPHYSICAL ENVIRONMENT

The aim of this section is to provide an overview of the natural and physical surroundings that influence and sustain life, including landforms, water bodies, climate, vegetation, and wildlife of the BPDM. In addition, the biophysical environment is characterised by the following key features:

Geography and Landforms

- ❖ BPDM covers areas with plains, hills, and part of the Magaliesberg mountain range, which is a significant geographical feature.
- ❖ It includes areas rich in platinum-group metal deposits, making mining a dominant land-use activity within the district.

Climate

- ❖ The district experiences a semi-arid climate, with hot summers and mild winters.
- ❖ Rainfall is typically seasonal, occurring mostly in summer.

Water Resources

- ❖ Major rivers such as the Crocodile River and Elands River flow through the district.

- ❖ Water availability is crucial for mining, agriculture, and human consumption but is often under stress due to the demand which is high throughout the district and province as well as South Africa at large.

Vegetation and Biodiversity

- ❖ The district falls within the Savanna Biome, characterised by grasslands, thornveld, and scattered trees.
- ❖ The Pilanesberg National Park and Magaliesberg Biosphere Reserve are important biodiversity hotspots, hosting wildlife like elephants, lions, and rhinos.

Human Impact

- ❖ Mining activities (especially platinum mining) significantly impact the environment through land degradation, water pollution, and habitat destruction.
- ❖ Urbanisation and agriculture also contribute to changes in land use, affecting natural ecosystems.

3.3.1 Biodiversity

Biodiversity is seen as the variety of different forms of life on earth, including the different plants, animals, and micro-organisms, the genes they contain, and the ecosystem they form. It refers to genetic



variation, ecosystem variation, and species variation (number of species) within an area, biome, or planet. The biome that dominates the BPDM is the Savanna Biome, which is the largest biome within the district. Moreover, a Biome is a large geographical area that shares similar climate, soil, vegetation, and animal life. Biomes are classified based on temperature, rainfall, and dominant plant species, and they support distinct ecosystems (refer to map 9).

3.3.2 Vegetation

The BPDM is made up of two biomes, the Savanna and Grassland Biomes. The Savanna Biome accounts for the vast majority of the BPDM, while the Grassland Biome only accounts for small portions toward the southern boundary of the district, especially the south-western side. The BPDM's primary vegetation types fall under these various categories namely, various Sandy Bushveld, various Mountain Bushveld, as well as Thornveld and Grassland (refer to map 10).

The first category of Mountain Bushveld encompasses the majority of territory in the district's south-west in KRLM, as well as the northern extents of RLM, including the area around the Pilanesberg Nature Reserve, and the central extents of MDLM and these include Dwarsberg – Swartruggens Mountain Bushveld, Pilanesberg Mountain Bushveld, Central Sandy Mountain Bushveld, Gold Reef Mountain and others.

The second category being the various Bushveld, is more common in the district's western, central and eastern extents along the major water bodies in MLM and MKLM and this also include Western Sandy Bushveld, Central Sandy Bushveld, Moot Plains Bushveld and others.

The third category being various Thornveld, forms the district's far north-western extents in MKLM, as well as the alignment along the northern edge of the Magaliesberg mountain ridges and these include Marikana Thornveld, Dwaalboom Thornveld, Zeerust Thornveld and Springbokvlake Thornveld.

The fourth category being various grasslands including Rand Highveld Grassland and Carletonville Dolomite Grassland. The Subtropical and Highveld Alluvial vegetation are also present within the district though constituting a small area.



Map 9: Biome illustration within the BPDM





3.3.3 Critical Biodiversity Areas

The Critical Biodiversity Areas (CBAs) refers to those terrestrial (land) and aquatic (water) areas that need to be preserved in their natural state in order to preserve the biodiversity pattern and keep ecosystems functioning (Berliner et al., 2007, Maree and Vromans, 2010). Ecological Support Areas (ESA) are areas or zones that must be protected in order to prevent the degradation of CBAs and formal Protected Areas (Berliner et al., 2007).

3.3.3.1 Critical Biodiversity Areas (CBAs) in South Africa

The CBAs are high-priority areas that are essential for the long-term survival of biodiversity and ecosystem functioning in South Africa. These areas are identified through systematic biodiversity planning and include key habitats for species, ecosystems, and ecological processes. CBAs are classified into two main categories:

1) CBA 1 (Irreplaceable Areas)

These areas are essential for biodiversity conservation and cannot be replaced without significant biodiversity loss. Examples: Habitat of endangered species (e.g. Cape Floral Region for plant diversity). Unique ecosystems (e.g., Maputaland Coastal Forests).

2) CBA 2 (Optimal Areas)

These areas are important for achieving biodiversity targets but offer

some flexibility in location. They support key ecological processes and species movement.

Functions of CBAs:

- Protecting endangered species and ecosystems.
- Maintaining ecological processes like water flow, pollination, and soil health.
- Supporting climate change resilience by conserving diverse habitats.
- Providing ecosystem services such as clean air, water, and food resources.

Examples of CBAs in the BPDM

- Magaliesberg Mountain Range (supports diverse plants and diverse ecosystems)
- Pilanesberg National Park (supports large mammal populations and diverse ecosystems)
- Hartbeespoort Dam (important for aquatic biodiversity and water quality)
- Kgaswane Mountain Reserve (provides habitat for endangered species and promotes ecosystem services)

Threats to CBAs:

- Urbanisation and agriculture leading to habitat destruction.
- Mining activities that degrade natural landscapes.



- Climate change altering habitats and species distribution.

Conservation of CBAs:

- Inclusion in protected areas (like national parks and reserves).
- Sustainable land-use planning and environmental regulations.
- Restoration projects for degraded CBAs.

CBAs play a crucial role in ensuring South Africa's rich biodiversity is preserved for future generations while balancing economic and social development.

3.3.3.2 Ecological Support Areas (ESAs) in South Africa

The ESAs are areas that are not necessarily formally protected but play a crucial role in supporting ecological processes and maintaining biodiversity. These areas help sustain ecosystems by connecting CBAs, maintaining natural water flow, and providing habitats for wildlife.

Functions of ESAs:

1. **Connectivity:** Link biodiversity-rich areas (e.g., nature reserves and parks) to prevent habitat fragmentation.
2. **Climate Resilience:** Help species adapt to climate change by providing migration routes.
3. **Water Regulation:** Support healthy river systems, wetlands, and groundwater recharge.
4. **Soil and Erosion Control:** Maintain vegetation cover to prevent land degradation.

Examples of ESAs in the BPDM:

- **Rivers and Wetlands:** Maintain water flow and quality, particularly in key river systems such as the Crocodile River, Elands River, and Hex River.
- **Buffer Zones around Protected Areas:** Establish and manage buffer zones around conservation areas such as the Pilanesberg National Park, Borakalalo Nature Reserve, and Vaalkop Dam Nature Reserve.
- **Corridors between Biomes:** Promote ecological linkages between Savanna and Grassland biomes within the district, especially across fragmented habitats in KRLM, MDLM, and RLM, enabling wildlife movement and genetic diversity.
- **Mountain Catchment Areas:** Protect and rehabilitate catchment zones in the Magaliesberg Mountain Range, a critical water source for surrounding communities and ecosystems.

Threats to ESAs:

- Urban expansion and agriculture
- Mining and deforestation
- Pollution and climate change

Conservation Strategies:

- ❖ Sustainable land-use planning

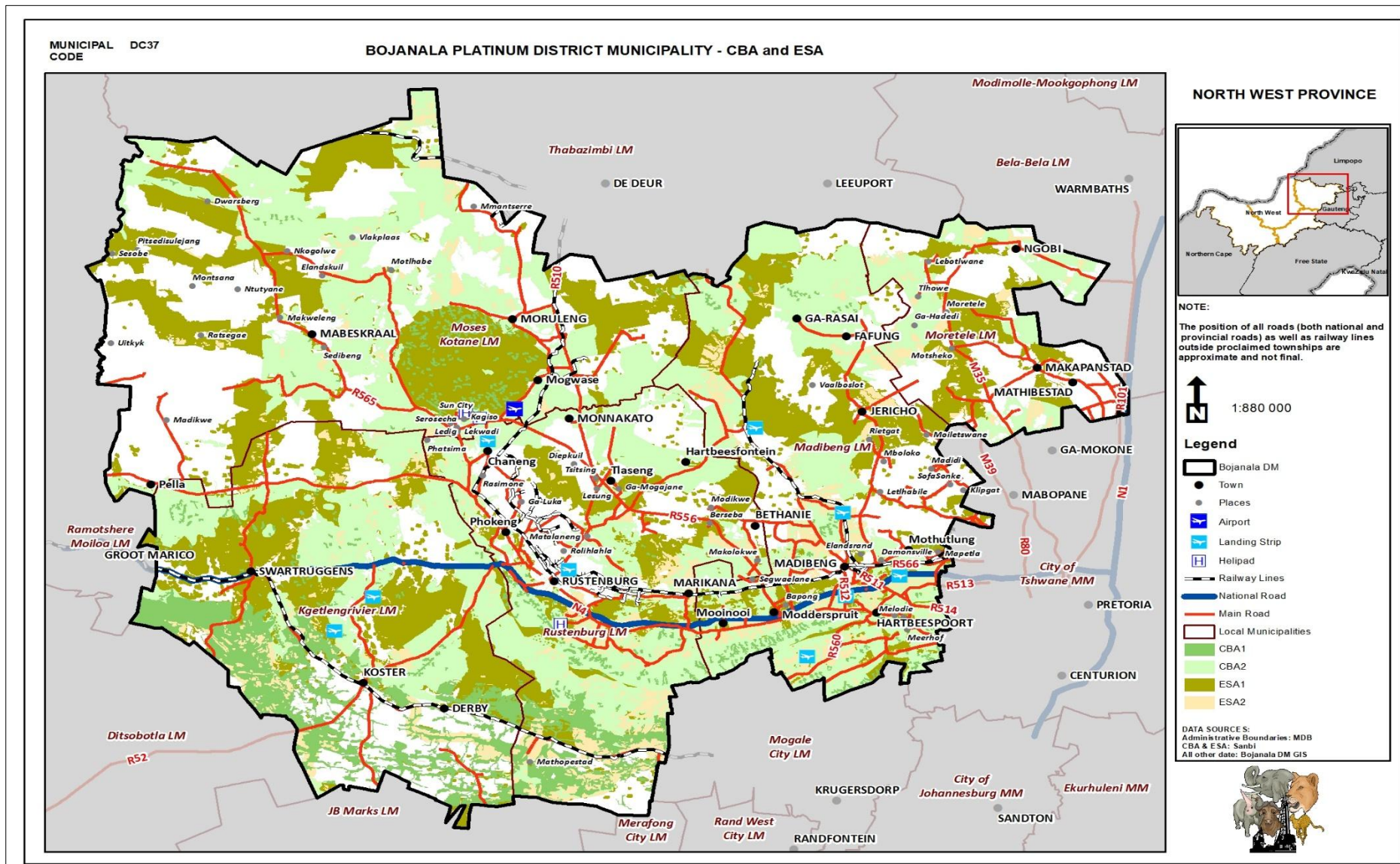


- ❖ Restoration of degraded ESAs
- ❖ Biodiversity-friendly farming practices

Protecting Ecological Support Areas is key to ensuring the long-term health of South Africa's ecosystems, biodiversity, and natural resources. ESAs are areas that provide ecosystem services that support socioeconomic development, such as water provision, flood mitigation, or carbon sequestration, but are not essential for achieving biodiversity representation targets or thresholds and nonetheless play a significant role in supporting the ecological functioning of critical biodiversity areas. These are found in most parts of the BPDm.










Map 11: CBA & ESA within the BPDM





3.3.4 Protected Areas

Protected areas are defined as regions with a distinct geographic boundary that are designated and administered in accordance with the National Environmental Management: Protected Areas Act 53 of 2000 (NEMPAA) and contain the types of protected areas mentioned in the Act's Section 9. There are several protected areas within the district (refer to map 12). Protected areas within Bojanala Platinum District Municipality include:

-  Borakalalo National Park,
-  Cradle of Humankind World Heritage Site,
-  Kgaswane Nature Reserve,
-  Magaliesberg Protected Environment,
-  Pilanesburg National Park, and
-  Vaalkom Dam Nature Reserve.
-  Marico Biosphere Reserve

The BPDM also comprises considerable conservation areas, which are mainly situated in the southern regions of the district. Protected Areas (PAs) in South Africa are specific regions designated for the conservation of biodiversity, ecosystems, and cultural heritage. These areas are legally protected under the National Environmental Management: Protected Areas Act (NEMPAA, Act 57 of 2003) and are managed to safeguard wildlife, habitats, and ecosystem services.

3.3.4.1 Types of Protected Areas in South Africa

Protected areas are classified into different categories based on their level of protection and purpose:

a) **National Parks**

- Managed by South African National Parks (SANParks).
- Protect large ecosystems and serve as major tourist attractions.

Examples:

- **Pilanesberg National Park**
- Kruger National Park (home to the Big Five).
- Addo Elephant National Park (protects elephants and other species).

b) **Nature Reserves**

- Managed by provincial conservation agencies, municipalities, or private entities.
- Focus on biodiversity conservation and eco-tourism.

Examples:

- Vaalkop Dam Nature Reserve
- Silkaatsnek Nature Reserve
- Morula Private Nature Reserve



c) **Special Nature Reserves**

- Declared to be strictly protected for nature conservation, excluding human residence, economic exploitation, or most recreational uses.

Examples:

- Borakalalo Game Reserve
- Kgaswane Mountain Reserve

d) **Protected Environments**

- Buffer zones around national parks and other key areas.
- Allow limited human activities while promoting conservation.

e) **Biosphere Reserves** (UNESCO-designated)

- Balance conservation with sustainable development.

Examples:

- Magaliesberg Biosphere Reserve.
- Marico Biosphere Reserve.

3.3.4.2 Importance of Protected Areas

- ❖ Preserve biodiversity and ecosystems.
- ❖ Support tourism and local economies.
- ❖ Help combat climate change by storing carbon in forests and wetlands.

- ❖ Protect endangered species (e.g., rhinos, cheetahs, and fynbos plants).

Challenges Facing Protected Areas

- ❖ Encroachment from mining applications
- ❖ Illegal settlements and informal activities.
- ❖ Climate change affecting ecosystems.
- ❖ Urban expansion.
- ❖ Water Pollution in areas such as Vaalkop Dam Nature Reserve
- ❖ Eutrophication (Hartbeesport Dam Catchment Area)

3.3.5 Climate and Rainfall

Climate influences the availability of water resources, the nature of the natural landscape, and the varieties of flora (refer to map 13-14). The amount of sun days, rainfall, and the frequency of wind have recently become important considerations in terms of the availability of alternative energy.

- **Temperature:** The temperature in Bojanala Platinum District Municipality is generally warm to hot throughout the year, with average summer temperatures ranging from 22°C to 31°C, and average winter temperatures ranging from 5°C to 21°C. These temperature ranges create favourable conditions for the growth of a variety of crops, particularly during the summer months.



- **Rainfall:** The region's average annual rainfall ranges from 500-600mm, with the majority of the rainfall occurring during the summer months. This rainfall is generally sufficient to support crop growth during the growing season. However, due to the region's semi-arid climate, water scarcity can be a significant issue during drought periods, particularly for rain-fed agriculture.
- **Wind:** The prevailing winds in Bojanala Platinum District Municipality are variable and can have a significant impact on the local agriculture industry. During the summer months, hot and humid air masses from the east and northeast can bring occasional thunderstorms, which can damage crops and cause soil erosion. During the winter months, dry and cool air masses from the southeast and southwest can cause dry conditions, which can also impact crop growth.
- **Drought:** Drought is a significant issue in Bojanala Platinum District Municipality, particularly during periods of low rainfall. Drought can have a significant impact on the local agriculture industry, particularly for rain-fed crops, as well as on livestock farming. Drought can lead to crop failure, reduced yields, and increased costs for farmers.

3.3.6 Climate Hazards

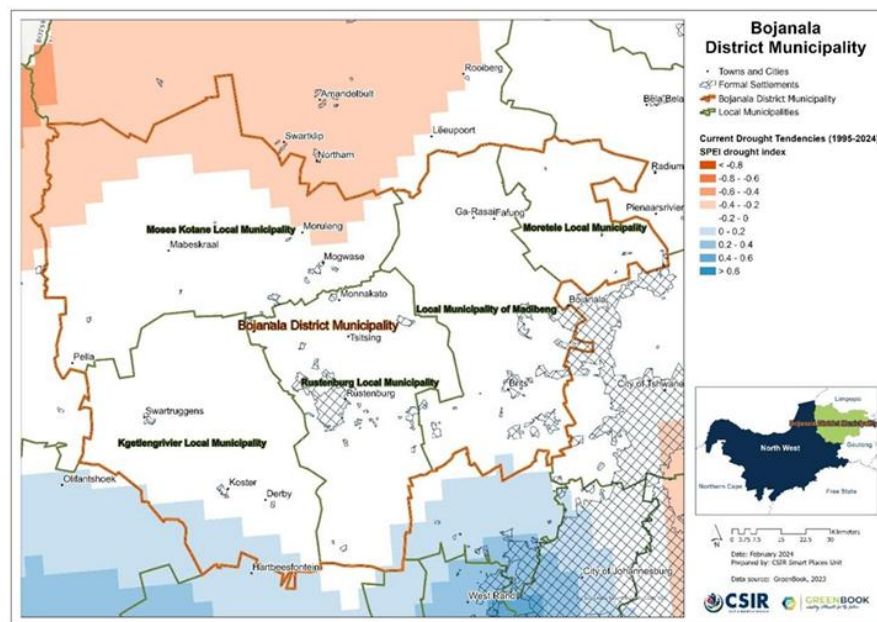
a) Drought

As according to the BPDM Climate Risk Profile Report based on the GreenBook (2024) analysis, the Bojanala Platinum District, drought tendencies are expected to increase. The figure 28 below depicts the projected change in drought tendencies (i.e., the number of cases exceeding near-normal per decade) for the period 1995-2024, relative to the 1986-2005 baseline period, under an RCP 8.5 “business as usual” emissions scenario (RCP 8.5). A negative value is indicative of an increase in drought tendencies per 10 years (more frequent than the observed baseline) with a positive value indicative of a decrease in drought tendencies

Near-normal drought tendencies are found across the district, and tendencies are projected to increase into the future. All settlements across the BPDM are at risk of drought. At the baseline, the far northern parts of the district are exposed to higher drought tendencies, which are projected to increase and expand further southwards into the future. These findings highlight the urgent need for localised climate adaptation strategies to manage growing drought risks in the region



Figure 28: Projected changes in drought tendencies from the baseline period (1986–2005) to the current period (1995–2024) across Bojanala Platinum District Municipality

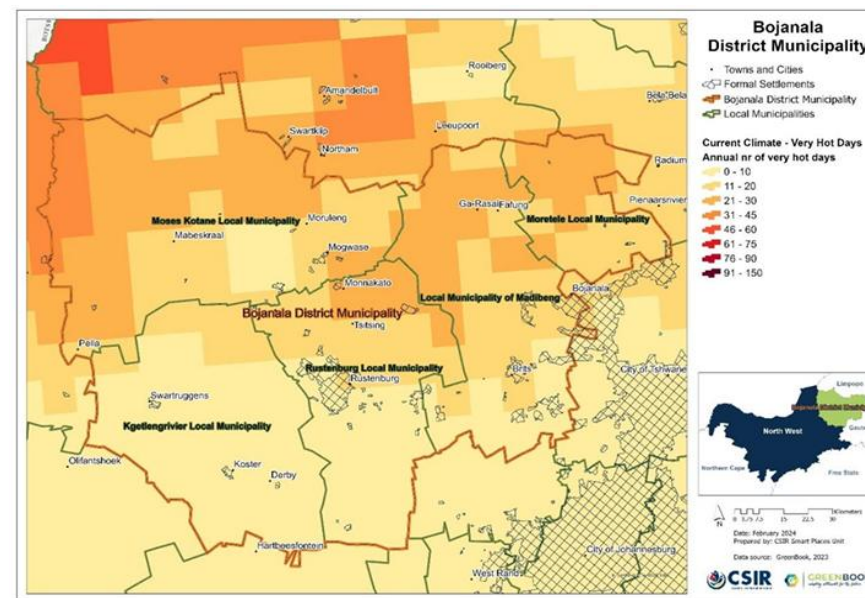


Source: BPDM Climate Risk Profile Report based on the GreenBook (2024)

b) Heat

With climate change, extreme heat is expected to intensify across South Africa, particularly affecting urban areas due to their heat-absorbing infrastructure. According to the BPDM Climate Risk Profile Report (2024), Under current climate conditions, the far northern parts of the District experience 40 to 50 very hot days annually with daily maxima exceeding 35°C, particularly near the Limpopo border.

Figure 29: Annual number of very hot days under baseline climatic conditions across Bojanala Platinum District



Source: BPDM Climate Risk Profile Report based on the GreenBook (2024)

Heatwaves are more frequent in the central district. In the future, very hot days are expected to increase in frequency and expand southward. Settlements most at risk of future heat stress include Swartruggens, Brits, and Mogwase.

[illegible]

c) Wildfire



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Land Reform and Rural Development
REPUBLIC OF SOUTH AFRICA

Most of the settlements across the district face a likely to possible likelihood to experience wildfires on their wildland-urban interface. It is projected that these settlements, could see an increase in risk of wildfires in the future. It is particularly true for settlements such as Mogwase, Swartruggens, Koster, Marikana, and Hartbeespoort.

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DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK

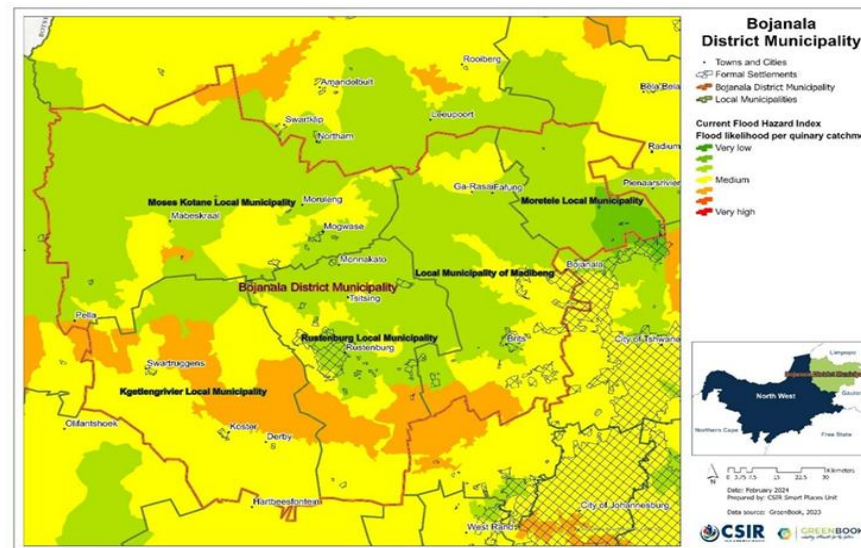


d) Flooding

The flood hazard assessment combines information on the climate, observed floods, and the characteristics of water catchments that make them more or less likely to produce a flood.

Figure 32 below depicts the flood hazard index of the individual Quinary catchments present or intersecting with the district. The flood hazard index is based on the catchment characteristics and design rainfall, averaged at the Quinary catchment level. Green indicates a low flooding hazard, while red indicates a high flood hazard. There is significant variation of the flood hazard index across the district. Most parts of the district have a low to medium flooding hazard, while areas in Kgetlengrivier and Rustenburg LM's have a high flooding hazard.

Figure 32: The current flood hazard index across Bojanala Platinum District Municipality under current (baseline)



Source: BPDM Climate Risk Profile Report based on the GreenBook (2024)

3.3.7 Climate impacts on key resources and sectors

a) Water resources and supply vulnerability

Water availability is directly impacted by the climate and climate change. It is not just changes in precipitation that need to be considered, but also increasing temperatures that will lead to increased evaporation which could further reduce runoff and increase water losses from dams.



Increasing temperatures will also impact on water demand, particularly for irrigation, but also from urban and industrial users. This could also contribute to reduced water security if existing systems are not able to meet these increasing demands. Increasing air temperatures will also increase water temperatures and hence increase pollution and water quality risks.

According to the BPDM Climate Risk Profile Report (2024), water supply vulnerability varies across the BPDM. Kgetlengrivier currently has low vulnerability, but future projections show an increase due to reduced runoff, rising temperatures, and population growth. Madibeng faces growing vulnerability despite the current supply exceeding demand, driven by declining rainfall and rapid population growth. Moretele's vulnerability is expected to decline, owing to reduced population growth. Moses Kotane shows a similar trend, with current supply exceeding demand and projected improvements by 2050. Rustenburg stands out with already high vulnerability, which is anticipated to rise significantly due to extreme population growth, reduced rainfall, higher evaporation, and declining runoff.

b) Agriculture, forestry and fisheries

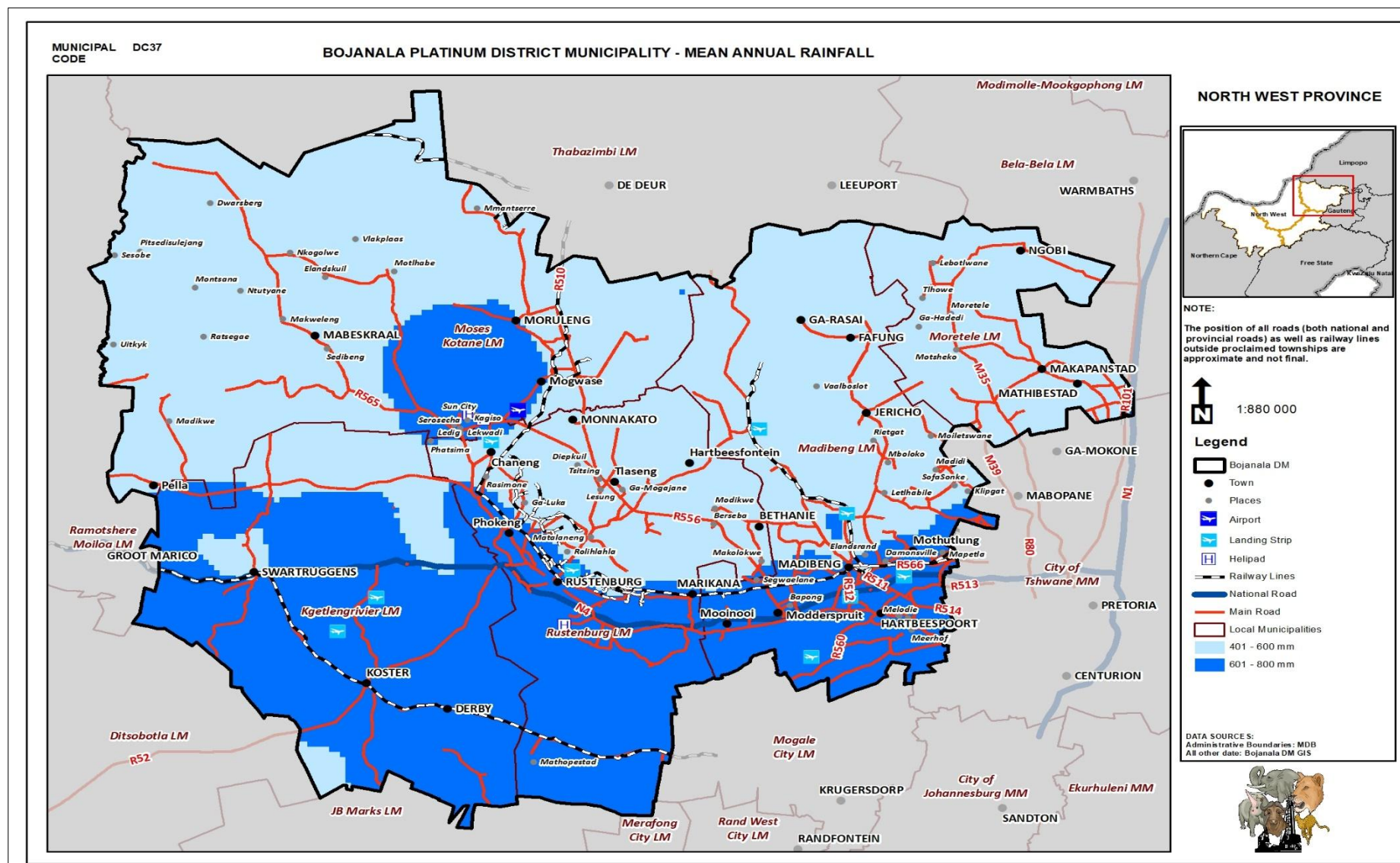
Agriculture, forestry, and fisheries (AFF) are highly vulnerable to climate change in South Africa, particularly in regions where they are key to local economies and livelihoods. Rising temperatures and

shifting rainfall patterns threaten the sector's sustainability, with impacts varying by location, commodity type, and available resources. Future climate conditions may make traditional farming practices more challenging.

According to the BPDM Climate Risk Profile Report (2024), In the Bojanala Platinum District Municipality (BPDM), agriculture, forestry, and fisheries contribute only 1.04% to local GVA, below the national average of 2.50%. However, climate change poses increasing risks to its productivity and sustainability through rising temperatures and changing rainfall patterns. Under the high-emission RCP 8.5 scenario, all local municipalities in BPDM face climate-related challenges to agriculture. Kgetlengrivier is highly vulnerable due to its reliance on beef and maize, which are threatened by heat stress. Madibeng may see rising costs and livestock health issues. Moretele, Moses Kotane, and Rustenburg face similar risks, with hotter, drier conditions affecting cattle and maize production. Despite differing economic dependence on agriculture, all areas are at risk and require urgent climate adaptation measures.



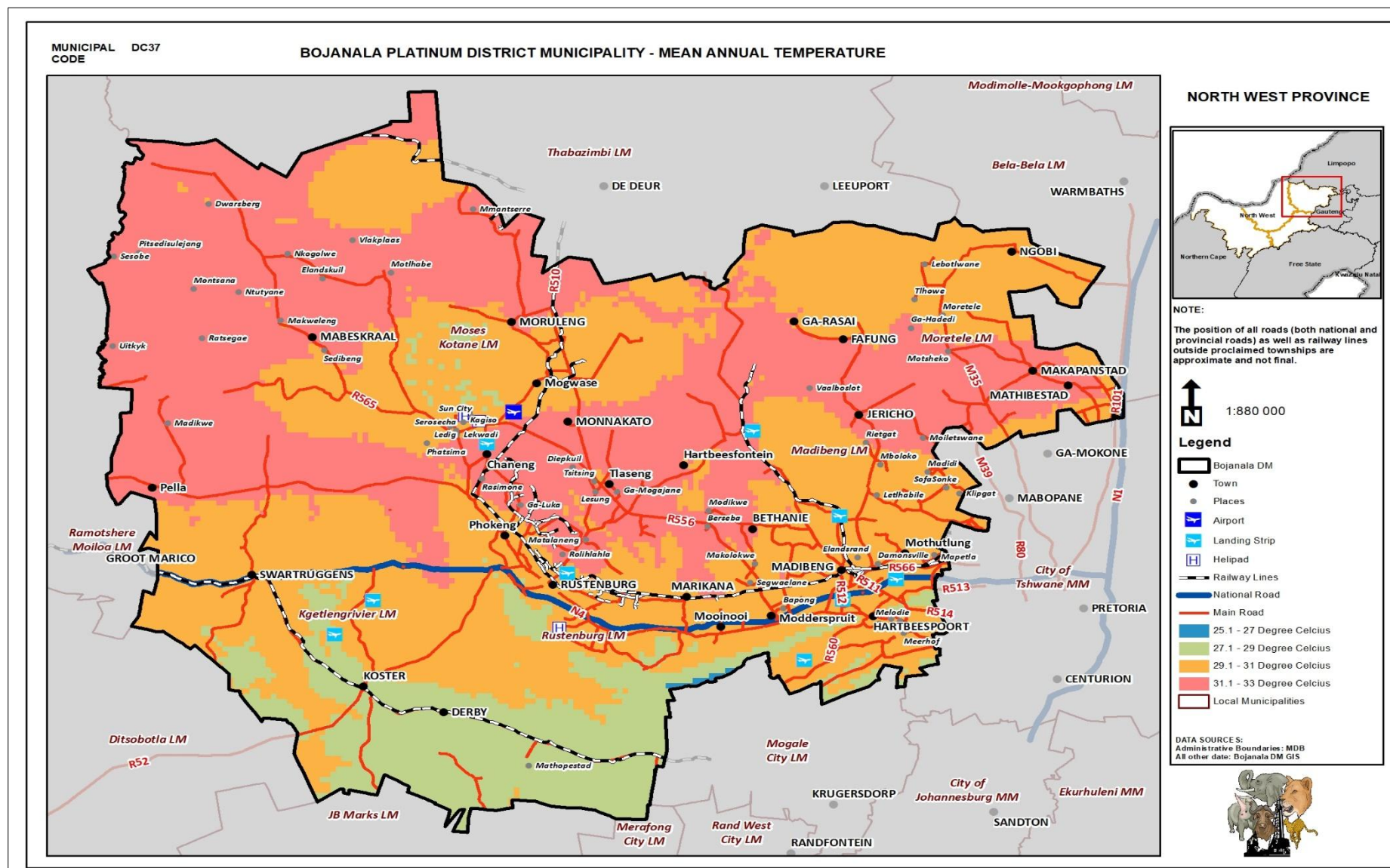
Map 13: Mean Annual Rainfall within the BPDM



DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



Map 14: Mean Annual Temperature within the BPDM



DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



3.3.8 Evaporation

The distribution is quite uniform, ranging from 1750 to 1800 mm/a. Evaporation in the catchment is much higher than the rainfall, as is the case in most places in South Africa. As with the rainfall, most of the evaporation occurs in summer. Bojanala Platinum District is in the Northwest Province of South Africa. The region experiences a semi-arid to sub-humid climate, which is characterised by high evaporation rates due to its hot temperatures and low annual rainfall. Like many areas in South Africa, evaporation in Bojanala is much higher than rainfall, typically ranging from 1,800 to 2,200 mm per year. Evaporation is highest during the summer months (October to March), when temperatures peak, and the region receives most of its rainfall. Despite receiving some rain, the heat leads to rapid water loss through evaporation.

3.3.9 Runoff

The runoff within the BPDM can be categorised into three main types: natural runoff, which is free from human influence, urban runoff, and effluent. Effluent from urban areas contributes significantly to inter-basin transfer within the municipality. Despite being a rapidly developing region, urbanisation levels in BPDM remain relatively moderate. For instance, across the district, urban areas account for a small fraction of the total land area, and the extent of impervious

surfaces such as paved roads, rooftops, and pavements varies depending on the degree of urbanisation within its local municipalities. These impervious surfaces reduce the natural infiltration of rainfall into the ground, leading to increased runoff generation and affecting the hydrological balance within the district.

3.3.10 Air Quality

The Provincial State of the Environment Report for the Northwest Province highlights the following key air pollution issues:

- a) **Traffic and Vehicle Emissions:** Emissions from fuel combustion, dust (including particulate matter), volatile organic compounds, lead, noise, nitrogen oxides, and carbon oxides contribute to air pollution, with traffic being a significant source.
- b) **Domestic Fuel Burning:** The burning of domestic fuels such as coal, charcoal, and wood by households, particularly those without access to electricity, results in the release of pollutants like sulphur dioxide, smoke, and carbon oxides.
- c) **Mining Operations:** Mining activities contribute to air pollution through the release of particulate matter, asbestos fibres, heavy metals (e.g., vanadium, chrome), odors, and noise.



d) **Forest, Bush, and Veld Fires:** During certain periods of the year, fires in forests, bushes, and velds significantly contribute to air pollution.

e) **Industrial Activities:** Various industrial processes, including smelting, energy production, transport, and waste dumps, release pollutants such as sulphur dioxide, nitrogen dioxide, carbon monoxide, volatile organic compounds, heavy metals, total suspended particulates, and odours and noise.

f) **Environmental Emissions via Air Movements:** The dispersion of environmental emissions through air movements results in the presence of sulphur dioxide, nitrogen dioxide, carbon dioxide, methane, volatile organic compounds, fungal spores, and pollen in the air.

g) **Other Uncategorised Sources:** Miscellaneous sources, including dust and smoke from landfills, informal businesses burning tires, copper cables, etc., contribute to air pollution.

3.3.11 Topography and Hydrology

The region is characterised by a diverse range of landscapes and topography, including mountains, grasslands, bushveld, and wetlands. One of the most prominent features of the topography in BPDM is the Magaliesberg mountain range, which runs from east to west through the region. The range is a popular destination for hikers and nature

enthusiasts, and is home to several natural attractions, including the Hartbeespoort Dam and the Magaliesberg Biosphere Reserve. The mountain range also acts as a natural barrier between the highveld grasslands to the south and the bushveld to the north.

The southern part of the region is characterised by flat to gently undulating grasslands, which are predominantly used for agricultural purposes. These grasslands are interspersed with a number of small, isolated hills and rocky outcrops. To the north of the Magaliesberg mountain range, the topography becomes more rugged and mountainous, with a mix of grassland and bushveld. This area is home to several large game reserves, including the Pilanesberg Game Reserve, which is a popular destination for wildlife enthusiasts. The bushveld areas are dominated by acacia and thorn trees, which provide a habitat for a range of wildlife species, including elephants, lions, and rhinoceros. There are also a number of wetlands and rivers throughout BPDM, including the Vaalkop Dam and the Marico River. These water sources are important for both agriculture and wildlife, and are also popular destinations for recreational activities such as fishing and boating.

3.3.11.1 Topography of Bojanala Platinum District Municipality

The BPDM topography is diverse (refer to map 15), shaped by mountain ranges, river valleys, and mining landscapes with the



following key Topographical features:

i. **Mountain Ranges**

The Magaliesberg Mountain Range which runs through the southern part of the district in parts of KRLM, RLM and MDLM. This ancient mountain range was formed over 2 billion years ago and consists of quartzite ridges and provides rugged terrain with steep cliffs and valleys. It is a key feature for tourism and biodiversity, with protected areas like the Magaliesberg Biosphere Reserve.

ii. **Plains and Valleys**

The district includes flat to gently undulating plains, especially in areas like Rustenburg and Brits. These plains support agriculture, settlements, and mining activities. Valleys created by river systems (like the Crocodile River) cut through the landscape, influencing drainage patterns.

iii. **River Systems and Wetlands**

The Crocodile River, Elands River, and Hex River flow through the district, creating fertile valleys and wetlands. These rivers are crucial for water supply, irrigation, and mining operations.

iv. **Mining Landscapes**

The district is rich in platinum-group metal deposits, leading to significant mining activity. Mining has altered the natural topography,

with deep open-pit mines, tailing dams, and slag heaps. Rustenburg, which is a major mining hub, has seen landscape changes due to extensive mineral extraction.

v. **Highveld and Bushveld Transition**

BPDM is located in the transition zone between the Highveld (elevated grassland) and Bushveld (savanna with scattered trees and shrubs). This results in a mix of rocky hills, open grasslands, and thornveld vegetation.

vi. **Elevation and Climate Influence**

The Magaliesberg Mountains have elevations reaching 1,800 meters above sea level, influencing local climate by creating cooler temperatures and orographic rainfall. The lower-lying plains experience warmer temperatures and semi-arid conditions.

3.3.11.2 Hydrology

The hydrological system of the BPDM is composed of various water sources such as rivers (perennial and non-perennial) and dams (refer to map 16). The BPDM comprises several rivers namely the Apies, Kareespruit, Marapoathutlawa, Pienaars, Rietspruit, Southpanspruit, Tlholwe (MLM), Waterkloofspruit, Waterfallspruit, Dorpspruit, Tributary of the Legadigadi Spruit, Rooikloofspruit, Sterkstroom Spruit, Hex (RLM), Moretele, Tolwane, and Crocodile River (MDLM). While



dams include Klipvoor Dam (MLM), Hartbeespoort Dam and Rooikoppies Dam (MDLM), Olifantsnek Dam, The Bospoort Dam, Vaalkop Dam, Buffelsproot Dam (Rustenburg LM), Koster Dam, Swartruggens Dam, Lindleyspoort Dam (KRLM), Molatedi Dam, Madikwe Dam, Mankwe Dam, and Pella Dam (MKLM). Furthermore, the agricultural and rural communities use groundwater resources, the quality of which is good to moderate. The agricultural operations, however, are responsible for the high salinity of groundwater resources (BPDM Annual Report, 2019/20). The hydrology of BPDM is shaped by its river systems, dams, wetlands, and groundwater resources. Water is a critical resource in this semi-arid region, supporting mining, agriculture, industry, and communities.

3.3.11.2.1 Major River Systems

Several rivers flow through BPDM, forming part of the Crocodile (West) and Marico Water Management Area and these include the following river systems:

(a) Crocodile River System

The Crocodile River (West) is the main river within the district. It originates from Gauteng and flows through Brits and Rustenburg, eventually joining the Limpopo River. This river supplies water for irrigation, mining, and domestic use but is under pressure from pollution and high-water demand.

(b) Elands River

It contributes to the Hartbeespoort Dam catchment, which is critical for regional water supply and irrigation, and flows through the Rustenburg and Brits areas, thus supporting agriculture and the local communities.

(c) Hex River

A smaller river flowing through Rustenburg, often impacted by mining activities and urban runoff.

3.3.11.2.2 Dams and Water Storage

Due to seasonal rainfall and high-water demand, BPDM relies on several dams for water supply and these include the following:

(a) Vaalkop Dam

Located near Brits, this dam is a key water source for mining, agriculture, and drinking water. It is also part of the Magalies Water Scheme, which supplies water to the entire district.

(b) Klipvoor Dam

This dam is also on the Crocodile River system, providing irrigation and drinking water.



(c) Bospoort Dam

Located near Rustenburg, mainly used for urban water supply and also for industrial activities.

3.3.11.2.3 Wetlands and Aquatic Ecosystems

BPDM has several wetlands, particularly along the riverbanks and floodplains, which helps in water filtration, flood control, and biodiversity conservation. Magaliesberg Biosphere Reserve also includes important wetlands and riparian zones which also support various aquatic species.

3.3.11.2.4 Groundwater Resources

Groundwater is a critical water source within the district, especially for rural communities and mining operations. Several boreholes and underground aquifers supply water, but over-extraction and contamination (from mining and agriculture) poses several risks.

3.3.11.2.5 Water Coverage

In the BPDM, water supply and coverage in the are critical issues, given the population density, the mining industry's water usage and the geographic distribution of water infrastructure.

Current Water Coverage Situation

- **Rustenburg (Urban Areas):**

Rustenburg, as the largest urban center in the BPDM, generally enjoys more reliable access to water. Water is supplied through the Magalies Water Supply Scheme, which sources water from various dams, including the Roodekopjes Dam and the Vaalkop Dam. Urban areas like Rustenburg and Brits are more likely to have piped water directly to households, thanks to better-developed infrastructure. However, there have been cases of water shortages, particularly in peak usage times, and some areas have experienced service disruptions due to aging infrastructure and high demand from both residential and mining activities.

- **Rural Areas:**

Many rural communities in the BPDM, particularly in the outlying parts of the district, face significant challenges related to water coverage. These areas may have less reliable access to clean drinking water, relying on communal taps, boreholes, or even water tankers for their supply. Water quality and accessibility are often inconsistent in rural areas, with some regions relying on untreated water from rivers, streams, or natural springs, which can be contaminated by surrounding agricultural or mining activities.



- **Mining Areas:**

The platinum mining sector in the BPDM is a key consumer of water. Mining operations use large quantities of water for processing, dust suppression, and other industrial processes. However, this increases the competition for water resources between the mining sector and the local communities. There have been concerns about the contamination of water supplies near mining areas. The mining industry needs substantial volumes of water for its operations, and at times, it has contributed to local water shortages or quality issues. Additionally, some mining areas use water from local boreholes, which may deplete aquifers over time if not properly managed.

3.3.11.2.6 Hydrological Challenges in BPDM

- ❖ **Water Scarcity:** The semi-arid climate and high demand from mining and urban areas put pressure on water resources.
- ❖ **Pollution:** Mining runoff, industrial waste, and agricultural chemicals affect water quality.
- ❖ **Climate Change:** Unpredictable rainfall patterns and longer droughts impact water availability
- ❖ **High Demand from Mining:** Mining operations in the district consume significant amounts of water, and as the industry grows, water demand continues to increase. This raises concerns about the sustainable management of water

resources, particularly in areas where water resources are limited or shared with local communities.

- ❖ **Water Quality:** There are concerns about water quality in certain areas of the district, especially in areas near mining sites. Pollution from mining activities, including heavy metals, chemicals, and other contaminants, can impact the quality of water supplies. This poses a risk to public health, particularly for communities that rely on untreated or inadequately treated water.
- ❖ **Ageing Infrastructure:** Much of the water infrastructure in the district, particularly in rural areas, is old and in need of repair or replacement. Leaks, pipe bursts, and outdated treatment plants contribute to water loss and can reduce the efficiency of water distribution networks.
- ❖ **Seasonal Variability:** Water availability can be affected by seasonal changes, such as droughts, which have a significant impact on water sources like dams and rivers. As climate change leads to more extreme weather patterns, the district may experience more frequent water shortages, especially in rural areas.



3.3.12 Geology, Mineral, and Soils

The geology of the BPDM is dominated by Platinum-Group of Metals (PGM) deposits, ancient rock formations, and mineral-rich igneous complexes. The district lies within the Bushveld Igneous Complex (BIC), which is one of the world's most significant geological formations, particularly for platinum mining.

3.3.12.1 Bushveld Igneous Complex (BIC) – The Key Geological Feature

The BIC is a 2-billion-year-old geological formation that covers parts of North West, Limpopo, Mpumalanga, and Gauteng. It is the largest layered igneous intrusion on earth, and rich in the PGMs, chrome, vanadium, and nickel. BPDM, especially Rustenburg and Brits, are located within the Western Limb of the BIC, making it one of the world's most important platinum mining district.

3.3.12.2 Major Rock Types in BPDM

BPDM has a varied geological landscape dominated by:

(a) Igneous Rocks

The Bushveld Igneous Complex consists of layers of mafic (dark, dense) and ultramafic (very high in iron and magnesium) rocks. Key rock types include the following:

- Norite, gabbro, and pyroxenite – Host rocks for platinum deposits.

- Anorthosite and chromitite layers – Rich in chrome and other metals.
- Dolerite intrusions – Occur as dykes and sills in various locations.

(b) Sedimentary Rocks

Older sedimentary formations occur beneath and around the Bushveld Complex, and these include:

- Transvaal Super group rocks – Dolomites and quartzites, often found in the Magaliesberg area.
- Karoo Super group formations – Sandstones and shales in some parts.

3.3.12.3 Platinum and Mineral Deposits

BPDM is one of the world's richest sources of PGMs, including platinum, palladium, rhodium, and gold.

(a) Platinum Mining Zones

The richest platinum ore bodies are found in two main layers of the Bushveld Complex namely:

1. Merensky Reef – High-grade platinum ore, historically the most mined.
2. UG2 Chromitite Layer – Another major source of platinum, rich in chromite. Mining towns like Rustenburg, Marikana, and Brits are key centers of PGM extraction.



(b) Other Mineral Resources

- Chromium (Cr) – Found in the UG2 layer, which is used in stainless steel production. Vanadium (V) – which occurs in magnetite layers, and mostly used in steel alloys. Nickel (Ni) and Copper (Cu) – Often found with PGMs, and mainly used in industry.

3.3.12.4 Structural Geology and Tectonics

The BIC, formed due to massive magma intrusions, which later cooled and solidified into different rock layers. Over millions of years ago, erosion and faulting have shaped the landscape. The Magaliesberg Range, a prominent feature within BPDM, consists mainly of quartzite from the Transvaal super group and is over 2 billion years old.

3.3.12.5 Geological Significance and Economic Impact

The BPDM is globally significant due to its platinum and its mineral wealth. The platinum mining industry is a major contributor to South Africa's economy the district GDP. However, mining activities have led to the environmental concerns, including land degradation, groundwater contamination, and air pollution.

3.3.12.6 Minerals

Around twelve (12) mineral commodities are found within the district which include: Chrome (MKLM, MDLM, RLM), Gold (MKLM), Granite (MKLM, MDLM, MLM, RLM), Fluorspar (MKLM), Iron (MKLM), Lead

(RLM) Limestone (MKLM), Marble (RLM), Platinum (MKLM, MDLM, RLM), Sand (MDLM), Slate (RLM), and Tin (RLM).

Minerals within the BPDM

The BPDM is one of the most mineral-rich districts in South Africa, primarily due to its location within the BIC. The district is best known for its PGMs but also contains other valuable minerals.

3.3.12.6.1 Platinum-Group Metals (PGMs)

BPDM is a major global producer of PGMs, which include: Platinum (Pt), Palladium (Pd), Rhodium (Rh), Iridium (Ir), Osmium (Os) and Ruthenium (Ru). These PGMs are mainly extracted from Merensky Reef – A high-grade platinum ore layer. UG2 Chromitite Layer – Also rich in platinum and chromium. Uses of PGMs include the following: Catalytic converters in vehicles (reducing carbon emissions), Jewelry and electronics as well as medical equipment (pacemakers, dental tools).

3.3.12.6.2 Chromium (Cr)

BPDM has significant chromite deposits, mainly in the UG2 layer. South Africa holds the world's largest chromium reserves, essential for stainless steel production. Uses of Chromium include the following: production of stainless steel and alloys as well as refractory materials (used in high-temperature applications).

3.3.12.6.3 Vanadium (V)

This metal is found in magnetite layers within the Bushveld Complex



and used in steel manufacturing and battery technology.

3.3.12.6.4 Nickel (Ni) and Copper (Cu)

Often found as by-products of platinum mining. Nickel is used in batteries, stainless steel, and coins. Copper is essential for electrical wiring and plumbing.

3.3.12.6.5 Gold (Au)

Small amounts of gold occur with PGMs in the Merensky and UG2 reefs. Gold mining is not as significant in BPDM compared to other regions like Gauteng and Free State, and also used for Jewellery and investments, Electronics and medical applications.

3.3.12.6.6 Iron and Titanium

Magnetite (iron-rich mineral) is found in the Bushveld Complex. Some areas contain titanium, used in aerospace and pigments.

3.3.12.6.7 Other Minerals

Fluorite (CaF_2) is used in steel production and chemicals, Limestone and Dolomite are found in the Magaliesberg Range, used in cement and construction.

Economic and Environmental Impact of Mining

Economic Benefits

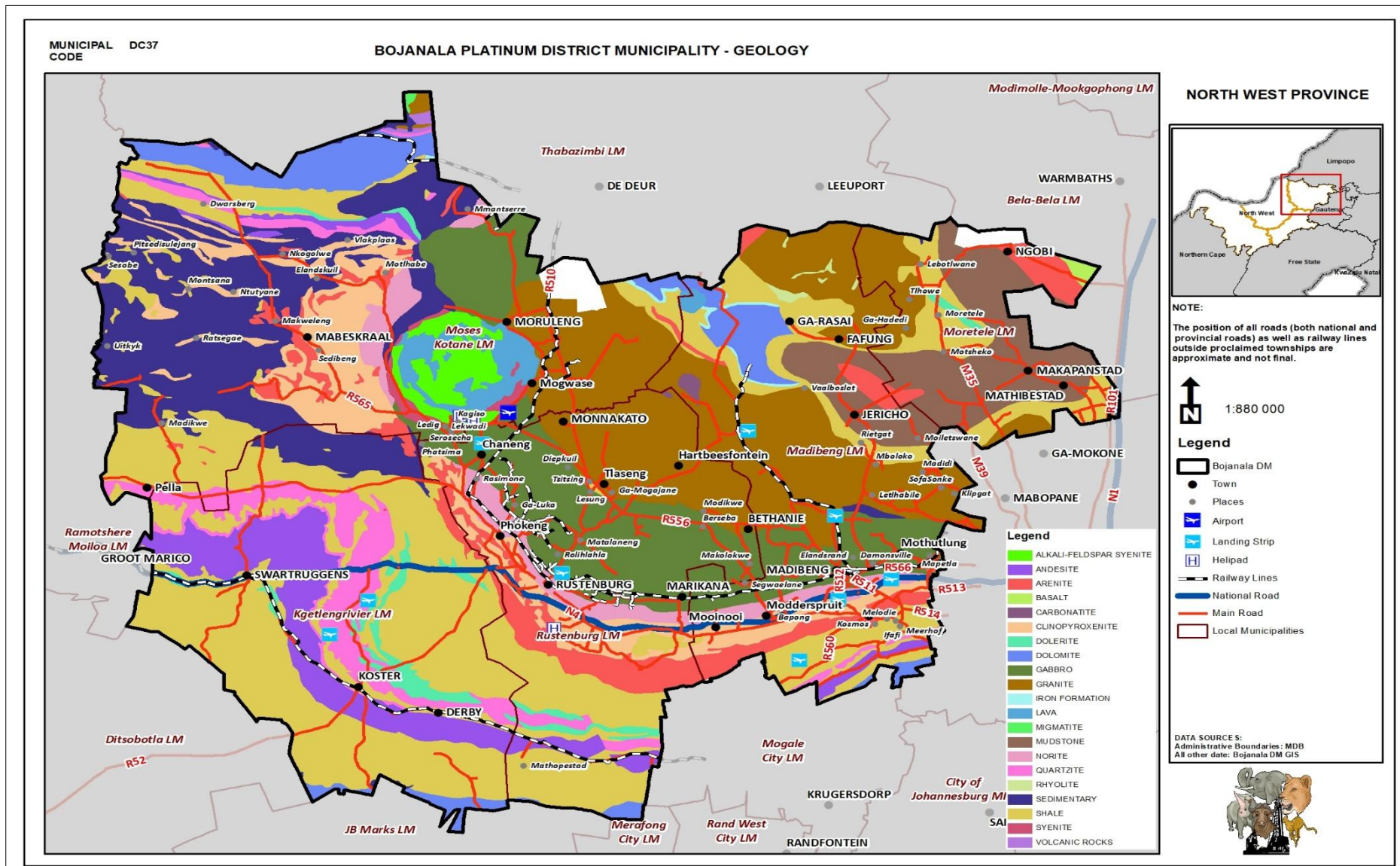
- Creates jobs and boosts South Africa's economy.
- Supports global demand for platinum, chrome, and vanadium.

Environmental Challenges

- Land degradation from open-pit mining.
- Water pollution from mine runoff.
- Air pollution from smelting operations.



Map 17: Geology within the BPD





3.3.13 Soil Types within the BPDM

The BPDM has a variety of soil types influenced by its geology, climate, and topography. The district is dominated by platinum-rich geological formations, and soil fertility varies across different areas within the district, impacting agriculture, vegetation, and land use.

3.3.13.1 Soil types

- ✚ Sa-SaLm-Sandy Saline Loam
- ✚ SaCl-Cl-Sandy Clay loam
- ✚ SaClLm-Cl-Sandy Clay Loam
- ✚ SaLm-SaClLm-Soil Profile that consists of two distinct layers a lower layer with preliminary sandy loam (SaLm) and upper layer with sandy loam (SaClm)

(a) Red and Yellow Sandy Loam Soils

Found in flat to gently sloping areas, especially around Brits and Rustenburg. Derived from weathered granite and quartzite. Moderate fertility, suitable for crop farming and grazing. With good drainage but susceptible to erosion.

(b) Clay-Rich Soils (Vertisols)

Found in low-lying areas and river valleys (i.e. along the Crocodile River). With dark-coloured soils with high clay content, forming deep, fertile profiles. Also with high water retention, making them good for irrigation-based farming (i.e. maize, vegetables), and can become

sticky when wet and hard when dry (shrink-swell properties).

(c) Lithosols (Shallow, Rocky Soils)

These soils are found in the Magaliesberg Mountains and Bushveld areas. They are derived from quartzite, dolomite, and norite. Thin, poorly developed soils with low fertility. Moreover, they support natural vegetation and wildlife, rather than agriculture.

(d) Ferralsols (Iron-Rich, Red Soils)

These soils are found in areas with intense weathering, such as the Bushveld Igneous Complex (BIC). Often high in iron and aluminium oxides, giving them a reddish colour. Generally infertile and require fertilisation for farming.

(e) Alluvial Soil

Often found in river floodplains (Crocodile River, Elands River). They are rich in organic matter, supporting high-yield crops and are important for irrigation farming (e.g., fruit and vegetable production).

3.3.13.2 Soil Fertility and Agricultural Suitability

- Highly fertile soils: Found in river valleys and clay-rich areas (good for irrigation farming).
- Moderately fertile soils: Sandy loams in Brits and Rustenburg (suitable for crops like maize, sorghum, and sunflowers).
- Low-fertility soils: Found in mountainous and rocky areas, mainly supporting natural vegetation and livestock grazing.



3.3.13.3. Soil Erosion and Degradation Issues

Soil Erosion issues include the following:

- Overgrazing and deforestation contribute to soil loss.
- Mining activities which disturb the soil structure, leading to degradation.

Soil Pollution issues include the following:

- Platinum mining and industrial activities release heavy metals, affecting soil health.
- Chemical fertilisers and pesticides used in intensive agriculture may lead to soil contamination.

3.3.13.4 Soil drainage

Soil drainage is an important factor in agricultural productivity, and the soils in Bojanala exhibit a range of drainage characteristics. Some areas have well-drained soils, which can be beneficial for crops that require good drainage, such as vegetables and fruits. Other areas have poorly drained soils, which can be challenging for agriculture, as they can lead to waterlogging and reduced crop yields. To mitigate the impact of poor soil drainage on agriculture in the district, farmers may need to use soil amendments and management techniques to improve soil structure and drainage. For example, adding organic matter such as compost or manure to the soil can help to increase water retention and improve soil structure. Proper irrigation and drainage

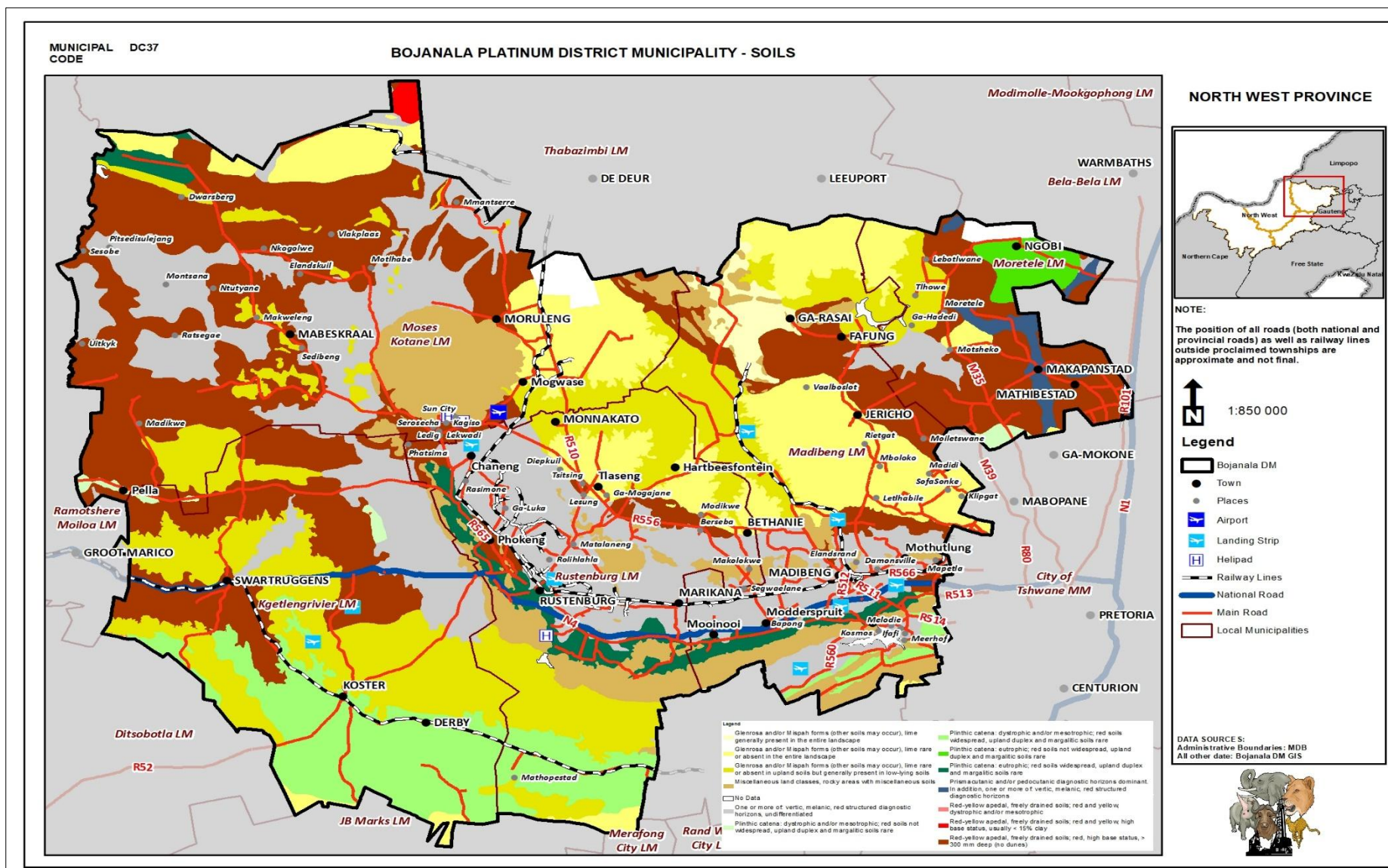
systems are also important to ensure that excess water is effectively removed from the soil and does not accumulate.

3.3.13.5 Soil depth

Map 19 below shows the soil depth in the district. Soil depth is an important factor in agricultural productivity, as it determines the amount of soil available for plant roots to grow and extract water and nutrients. The depth of the soil in the district varies depending on the specific soil type and location. Some areas have soils that are relatively deep and well-developed, while others have soils that are shallow and have a high proportion of rock fragments or bedrock. In general, soils in the district are relatively shallow, with depths ranging from less than 30cm to 150cm, depending on the specific location and soil type. The shallow soil depth can be a challenge for agriculture, as it may limit the ability of crops to access sufficient water and nutrients. To mitigate the impact of shallow soil depth on agricultural productivity, farmers may need to use soil amendments, such as adding organic matter or fertilisers, to improve the soil's fertility and ensure that crops receive the nutrients they need. Additionally, careful management of irrigation and water resources may be necessary to ensure that crops receive sufficient water despite the shallow soil depth.



Map 19: Soils within the BPDM





3.3.13.6 Soil Irrigation Potential

The soil in the BPDM is generally fertile and suitable for agriculture, although there are variations in soil type and quality across the region. The most common soil types in the area are loamy soils, which have good water-holding capacity and are suitable for a range of crops. However, there are also areas with sandy soils, which have lower water-holding capacity and may require more frequent irrigation. The region has a semi-arid to arid climate, with low and erratic rainfall, particularly in the western parts of the district. This means that irrigation is often necessary to support agriculture in the region. The primary source of irrigation water in the Bojanala Platinum District Municipality is groundwater, which is extracted from boreholes and wells. Surface water sources, such as rivers and dams, are limited and often not reliable due to the region's low rainfall.

Despite the need for irrigation, the potential for soil irrigation in the BPDM is somewhat limited by the high cost of infrastructure, as well as by water availability and quality. The region has a relatively high population density, which places significant demands on water resources, particularly in urban and peri-urban areas. As a result, many farmers in the region rely on rain-fed agriculture, which can be risky due to the region's low and variable rainfall. Overall, the soil irrigation potential in the BPDM is influenced by a range of factors,

including soil type and quality, water availability and quality, climate, and the cost of irrigation infrastructure. While there is potential for agricultural development in the region, particularly in areas with good soils and reliable water sources, the high cost of irrigation infrastructure and the limited availability of water will continue to be significant challenges for farmers in the area.

3.3.14 Agriculture

The overall broad land cover of the BPDM area is broadly described as “degraded forest and woodland,” which constitutes a huge portion of the district's land area. Other important land cover categories include areas described as “forest and woodland,” “subsistence farming activities,” and “commercial agriculture”. Subsistence farming activities are in the eastern and southern parts of the district, particularly around Brits, Rustenburg, and Moses Kotane Local Municipalities. The region also supports commercial agriculture, which includes the production of crops such as maize, sunflower, citrus fruits, and vegetables, as well as livestock farming. Agricultural activities are often constrained by water scarcity due to high evaporation rates and low rainfall, which impact productivity across the district. Commercially cultivated dry land farming activities occur within the northern and eastern parts of the BPDM. More than 200 km² of the district is taken up by this type of farming activity. Agriculture is one of the key sectors,



alongside mining, in which the Northwest Province, including the BPDM, holds a comparative advantage over other provinces. The agricultural sector contributes significantly to both the provincial GDP and employment, providing jobs for a large portion of the labour force. The main agricultural products within the district include sunflower seeds, maize, groundnuts, wheat, and cattle farming. The eastern areas of the BPDM, benefiting from higher rainfall, focus on the production of vegetables, flowers, and poultry farming. Horticulture and biofuels show promise for expansion, with several bio-fuel initiatives already underway in the region. The BPDM forms part of the North West's role as a food basket of South Africa, with maize and sunflowers being the most important crops. The province is the leading producer of white maize, contributing 22% of all commercial maize grown in the country, of which 78% is white maize and 22% is yellow maize.

3.3.14.1 Agriculture in Bojanala Platinum District Municipality

Agriculture in the BPDM is shaped by soil quality, climate, and water availability. Whilst mining dominates the local economy, and agriculture remains important for food production, rural livelihoods, and economic diversification. The Agriculture and Agro-processing Master Plan 2022, has identified the predominant part of the BPDM to be propitious for commodities such as Cattle, Maize, Wheat,

Tobacco, Peanuts, Cotton, and Citrus. The following are the main agricultural activities as occurring within the BPDM.

Main Agricultural Activities

(a) Crop Farming

The BPDM has both commercial and subsistence farming, focusing on the following:

- Maize – Grown in areas with moderate soil fertility (Brits, Rustenburg).
- Sunflowers – Common in drier regions due to drought resistance.
- Vegetables – Tomatoes, onions, cabbages, and peppers thrive in irrigated areas (Brits, near Crocodile River).
- Citrus & Fruit Farming – Mainly along riverbanks, using irrigation.

Brits is a major agricultural hub, known for irrigation farming and vegetable production.

(b) Livestock Farming

- Cattle farming – For beef and dairy production.
- Goats & Sheep – Adapted to dry bushveld conditions.



- Poultry farming – A growing industry, supplying meat and eggs.

Bojanala's Bushveld areas support extensive livestock farming due to available grazing land.

3.3.14.1.1 Factors Influencing Agriculture in BPDM

(a) Climate – Summer rainfall (November – March) supports crop farming with winter (dry and mild) which are suitable for livestock farming, whilst droughts and irregular rainfall affect farming sustainability.

(b) Soil Types

- Fertile alluvial soils (along rivers) allow for high-yield crops.
- Sandy loam and clay soils support maize and sunflowers.
- Rocky, shallow soils (Magaliesberg) are unsuitable for crops but good for grazing.

(c) Water Availability & Irrigation

- The Crocodile River and dams (Vaalkop, Klipvoor) provides irrigation for commercial farming. Many areas rely on boreholes and groundwater, and on the other hand mining activities reduce water quality.

3.3.14.1.2 Challenges Facing Agriculture in BPDM

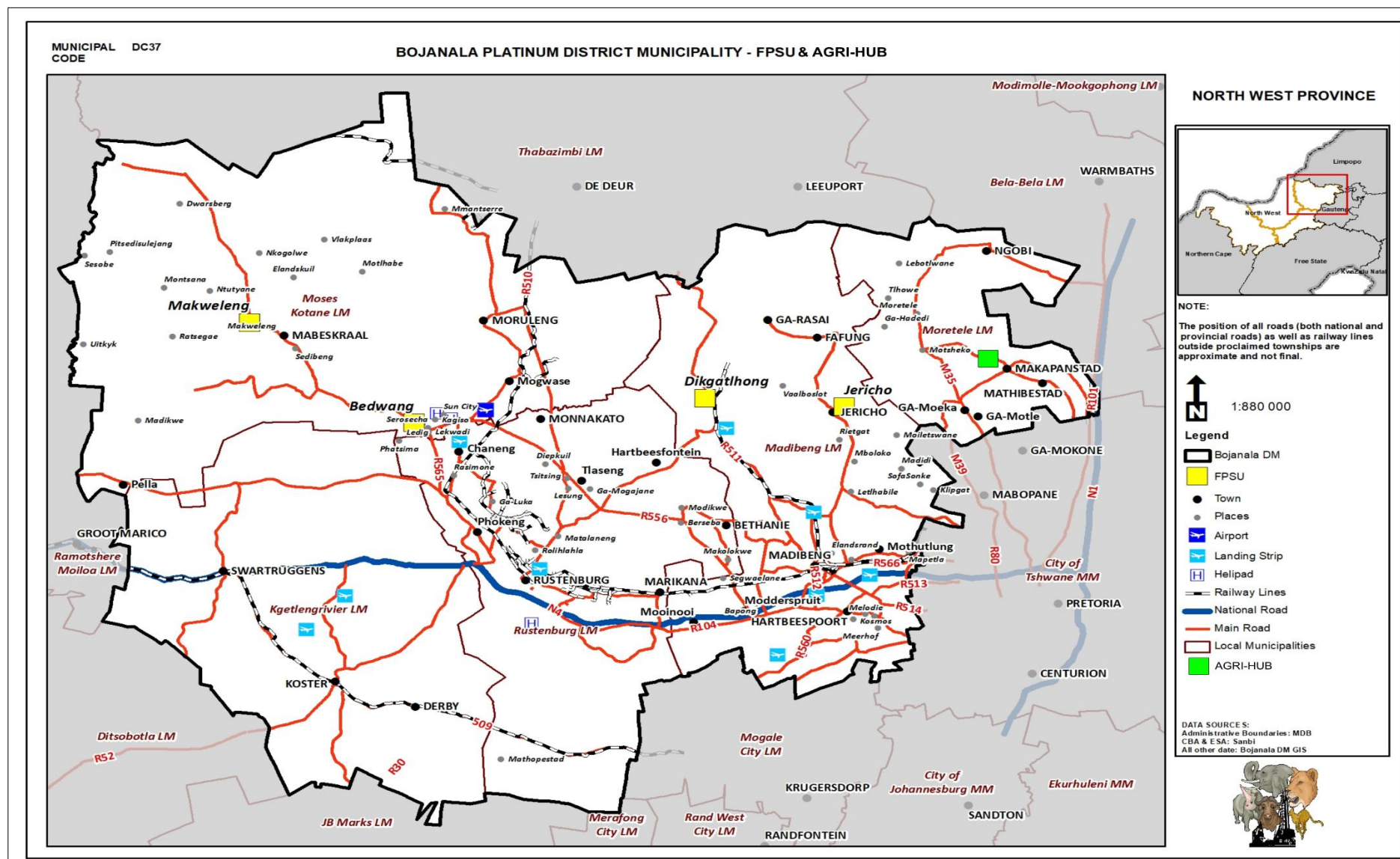
- Drought and Climate Change – unpredictable rainfall affects crop yields.
- Soil Erosion and Degradation – overgrazing and mining activities damages the overall farmland.
- Water Scarcity and Pollution – mining activities and urban growth put pressure on water sources.
- Competition with Mining Activities – most of the farmland is often to the expansion of mining activities (mines).

3.3.14.1.3 Opportunities & Future Prospects

- Irrigation Expansion – using river and dam water for year-round farming.
- Agro-Processing & Agribusiness – value-added industries (e.g., fruit processing, dairy products).
- Sustainable Farming Practices – Conservation agriculture and drought-resistant crops.



Map 20: FPSU's & Agri-Hub





Map 21: Commodities spread within the BPD





3.3.14.2 Land Capability

Land capability refers to the ability of land to support various uses, including agriculture, mining, conservation, and urban development, without causing long-term degradation. In the BPDM, land capability is influenced by soil type, climate, topography, and land use pressures.

3.3.14.2.1 Land Capability Classification in BPDM

The BPDM has four main land capability zones, each suited for different land uses:

(a) High-Potential Agricultural Land

Mainly found in the Brits and Crocodile River valley areas. Fertile alluvial soils support crop farming and irrigation agriculture. Major crops include maize, vegetables, citrus, and sunflower and so forth. Challenges associated with high potential agricultural land include water availability and competition with urban expansion as well as mining.

(b) Moderate to Low-Potential Agricultural Land

Covers large areas of sandy loam soils and clay-rich soils and supports livestock grazing and limited dryland farming. These are common in the Bushveld areas near Rustenburg, Moses Kotane, and Kgetlengrivier Local Municipalities. Challenges here are susceptibility to drought and overgrazing.

(c) Mining and Industrial Land

The district is dominated by platinum, chromium, and vanadium mining, and these are concentrated in Rustenburg, Marikana, and Brits. Mining has transformed landscapes, leading to land degradation and pollution. The challenges include rehabilitation of mined land for future use.

(d) Conservation and Protected Areas

Conservation and protected areas in BPDM include Magaliesberg Biosphere Reserve, various nature reserves, and game farms. With key conservation areas including:

- Magaliesberg Mountain Range (rocky terrain, rich biodiversity).
- Pilanesberg National Park (wildlife conservation, eco-tourism).

Challenges include encroachment by human activities and climate change.

3.3.14.2.2. Factors Affecting Land Capability

(a) Soil Fertility & Quality

- Highly fertile soils in river valleys support agriculture.
- Rocky, shallow soils in mountainous areas limit farming potential.



(b) Climate & Water Availability

- Erratic rainfall and droughts affect agricultural productivity.
- Irrigation from the Crocodile River supports farming in some areas.

(c) Topography

- Flat to gently sloping land is suitable for farming.
- Mountainous and rocky terrain (Magaliesberg, Pilanesberg) is better for conservation and tourism.

(d) Land Degradation & Mining Impact

- Mining activities have led to soil erosion, land degradation, and water pollution.
- Rehabilitation efforts are needed to restore degraded land for future agricultural or conservation use.

3.3.14.2.3. Sustainable Land Use Recommendations

- Irrigation Expansion – Maximise use of fertile lands near river valleys.
- Land Rehabilitation – Restore mined areas for future productive use.
- Agroforestry & Sustainable Farming – reducing soil erosion and improving land resilience.
- Protected Area Management – Strengthen conservation efforts in biodiversity zones.

3.3.14.2.4 Land Suited for Cultivation

Class I: Land very suitable for intensive and well-adapted cultivation.

The Bojanala Environmental Management Framework indicates that most land in the district has moderate potential for crop production. This includes most of the land in the central and eastern parts of the BPDM, i.e. most of the land in the Moretele, Madibeng and Rustenburg local municipalities, as well as some land in the KRLM and eastern part of the MKLM. The potential of the land in a large part of the MKLM, as well as small pockets of and in all the other municipalities have a marginal potential for crop production. In a fairly large part of the KRLM and smaller parts of the Moses Kotane, Rustenburg and Madibeng local municipalities, it has no potential for crop production and is only suitable for livestock grazing. The land in the mountainous areas is not suitable for agricultural production and classified as wilderness.

Class II: Land suitable for intensive cultivation.

Crop fields exist in all five local municipalities in the BPDM. The majority of these are cultivated annually and used for dryland crop production or planted pastures, while many of those in the proximity of the Crocodile River and some in the southern parts of KLM are irrigated. While most cultivated lands are used for grain crop production, some are also used for horticulture or viticulture production.



In the Kgetlengrivier, Rustenburg and Madibeng local municipalities, most of the cultivated fields are commercially farmed, while most cultivated fields in the Moses Kotane and Moretele local municipalities are cultivated by subsistence farmers.

Class III: Land for moderate well adapted cultivation.

Land in this class has severe limitations that reduce the choice of plants or require special conservation practices, or both. When used for cultivated crops, the conservation practices are usually more difficult to apply and to maintain. The number of practical alternatives for average farmers is less than that for soils in Class II. Limitations may result from a range of factors ranging from steep slopes, susceptibility to erosion, problems with the water holding capacity and climatic conditions.

Class IV: Poorly adapted cultivation

Land in Class IV has very severe limitations that restrict the choice of plants and normally require very careful management. It may be used for cultivated crops, and conservation practices are more difficult to apply and maintain. In the BPDM, which includes the local municipalities of Kgetlengrivier, Madibeng, Moretele, Moses Kotane, and Rustenburg, detailed land capability assessments are essential for effective spatial planning and land use management. According to the

Bojanala Platinum District Municipality EMF, most of the land in BPDM has a moderate potential for crop production, which corresponds to Class III or IV in the land capability classification. This includes most of the land in the central and eastern parts of BPDM, i.e., most of the land in the Moretele, Madibeng, and Rustenburg local municipalities, as well as some land in the Kgetlengrivier and eastern part of the Moses Kotane local municipalities.

3.3.14.2.5 Land with Limited Use – Generally Not Suited To Cultivation

Class V: Intensive grazing.

Land in this class has little or no erosion hazard but have other limitations impractical to remove. That limits its use largely to pasture, range, woodland or wildlife food and cover. These limitations restrict the kind of plants that can be grown and prevent normal tillage of cultivated crops. According to the Bojanala Platinum District Municipality EMF, most of the land in the district has moderate potential for crop production, particularly in the central and eastern parts, encompassing Moretele, Madibeng, and Rustenburg local municipalities, as well as parts of KRLM and MKLM. However, certain areas, especially within KRLM and parts of MKLM, are classified as having no potential for crop production and are only suitable for livestock grazing.



Class VI: Moderate grazing.

Land in Class VI has severe limitations that make it generally unsuited to cultivation and limits its use largely to pasture and range, woodland or wildlife food and cover. In the BPDM, which includes the local municipalities of Kgetlengrivier, Madibeng, Moretele, Moses Kotane, and Rustenburg, detailed data on the distribution and percentage of Class VI land within each municipality is not readily available in public documents. However, general land capability information indicates that: KRLM, a substantial portion of this area is classified as having no potential for crop production and is only suitable for livestock grazing. Moses Kotane Local Municipality, like KRLM, large areas are deemed unsuitable for crop production, being more appropriate for grazing purposes. Rustenburg and Madibeng Local Municipalities, these regions have a mix of land capabilities, with some areas suitable for crop production and others more appropriate for grazing or forestry. MLM, while specific data is limited, it is likely that this area also contains land with varying capabilities, including sections suitable primarily for grazing.

Class VII: Light grazing.

Land in this class has very severe limitations that makes it unsuited to cultivation and that restrict its use largely to grazing, woodland or wildlife. Restrictions are more severe than those for Class VI because

of one or more continuing limitations that cannot be corrected. According to the Bojanala Environmental Management Framework (EMF), the land capability within BPDM varies significantly: Moderate Potential for Crop Production, most of the land in the central and eastern parts of BPDM, encompassing areas within Moretele, Madibeng, and Rustenburg local municipalities, falls into this category. Marginal Potential for Crop Production, large parts of the Moses Kotane Local Municipality and small pockets in other municipalities are classified here. Non-Arable Land (Suitable for Grazing), significant portions of the Kgetlengrivier Local Municipality and smaller areas in Moses Kotane, Rustenburg, and Madibeng are designated as non-arable, suitable primarily for livestock grazing.

Class VIII: Wildlife.

Land in Class VIII has limitations that preclude its use for commercial plant production and restrict its use to recreation, wildlife, water supply or aesthetic purposes. Limitations that cannot be corrected land in Class VIII cannot be expected to return significant on-site benefits from management for crops, grasses or trees, although benefits from wildlife use, watershed protection or recreation may be possible. Badlands, rocky outcrop, sandy beaches, river wash, mine tailings and other nearly barren lands are included in Class VIII. Wilderness Areas, the mountainous regions within BPDM are classified as wilderness,



indicating very limited potential for agricultural activities. South Africa (Class III –VIII) has severe limitations with respect to climate (rainfall), terrain or soils. Arable land is represented by Class I-III and it covers 12.4% of the country. Another 11% is covered by marginal land (Class IV). In the BPDM, Land Class VIII refers to areas that are unsuitable for agricultural purposes due to severe limitations like steep slopes, poor soil conditions, erosion risks, or rocky terrain. These lands are generally designated for conservation, wildlife habitats, or recreation rather than for cultivation or grazing. BPDM comprises five local municipalities: Kgetlengrivier Local Municipality, Madibeng Local Municipality, Moretele Local Municipality, Moses Kotane Local Municipality and Rustenburg Local Municipality.

Class VIII Land Distribution

Significant portions of Class VIII land are located in areas with mountainous terrain and steep gradients, especially in the Magaliesberg and Pilanesberg regions. These areas are predominantly in KRLM and parts of MKLM and MDLM, where terrain and soil limitations dominate. Percentage Estimates - While specific percentages of Class VIII land for the district and each local municipality are not readily available, maps and environmental assessments indicate that, KRLM has the highest proportion of Class VIII land due to its rugged topography. Madibeng Municipality contains

areas within the Magaliesberg Biosphere Reserve, which are also classified as Class VIII. Other municipalities, like Rustenburg and MLM, have lower percentages of Class VIII land, with most land being suitable for grazing or mixed-use purposes.



3.3.14.3 High Potential Agricultural Land

High-potential agricultural land in the BPDM is primarily located in fertile river valleys and areas with good soil, water availability, and a favourable climate. These areas within the district support commercial and subsistence farming, contributing to food production and the local economy.

3.3.14.3.1 Key Areas of High-Potential Agricultural Land

(a) Brits Area – Crocodile River Valley

- Soil – Fertile alluvial and clay-rich soils, ideal for crop farming.
- Water – Irrigation from the Crocodile River and Hartebeespoort Dam.
- Crops Grown – include maize, wheat, and sunflowers also known as staple crops, vegetables (tomatoes, onions, cabbages, peppers etc), with citrus & fruit farming (oranges, lemons, avocados etc).
- Agricultural Type - Irrigation-based commercial farming, supporting local markets and exports.

(b) Rustenburg and Surrounding Areas

- Soil – Sandy loam and clay soils, moderately fertile.

- Water – Irrigation mostly is from rivers and boreholes, however, they are more dependent on rainfall within the district.
- Agriculture – Livestock farming (cattle, sheep, goats) as well as dry land farming (maize, sorghum, and sunflower).

(c) Moses Kotane & Kgetlengrivier Local Municipality

- Soil – A mix of sandy and clay soils, with patches of high fertility.
- Water – dependent on boreholes and small dams.
- Agriculture – Livestock farming (cattle and poultry), with limited crop farming due to lower soil fertility and water constraints in some areas within the local municipalities.

3.3.14.3.2 Factors Supporting High Agricultural Potential

- Fertile Soils – alluvial and clay-rich soils along rivers support high-yield crops.
- Irrigation Infrastructure – the Crocodile River and Hartebeespoort Dam provide reliable water sources.
- Climate – warm summers and moderate winter's support year-round farming.



- Market Access – proximity to Gauteng's urban markets (Johannesburg & Pretoria) boosts agricultural trade.

3.3.14.3.3 Challenges Affecting High-Potential Agricultural Land

- Water Scarcity – Competition for water between agriculture, mining, and urban areas.
- Soil Degradation & Erosion – Overuse of land and poor farming practices reduce soil fertility.
- Urban Expansion & Mining Pressure – Brits and Rustenburg face loss of farmland due to mining, industrialisation, and urban growth.
- Climate Change – Unpredictable rainfall and droughts impact crop yields.

3.3.14.3.4 Strategies for Sustainable Agriculture

- Expand Irrigation Farming – improving water management for efficient crop production.
- Soil Conservation Practices – using crop rotation, cover crops, and reduced tillage to maintain soil fertility all over the district.
- Agro-Processing & Value-Adding – developing food processing industries (Agri-Parks, FPSU) to increase profits for farmers.

- Land Protection Policies – preventing urban and mining expansion from consuming prime agricultural land within the district.

3.3.14.3.5 Initiatives to Protect High-Potential Agricultural Land

- Municipalities to continue with identification of prime Agricultural Land (based on soil quality, irrigation potential, and food production value) within their Municipal Spatial Development Frameworks with protective Guidelines.
- Encouraging Infill development within major residential areas in the BPDM and discouraging urban sprawl.
- Proactively identify and promote areas for future residential development (including Human Settlements initiatives - PHSHDA)

3.3.15 Biosphere Reserves

3.3.15.1 Magaliesberg Biosphere Reserve

The Magaliesberg Biosphere is a globally significant ecological and cultural asset located within the Bojanala Platinum District Municipality (BPDM). Recognized as a UNESCO Biosphere Reserve in 2015, it serves as a key environmental, economic, and tourism hub within the BPDM. The Magaliesberg biosphere encompasses diverse landscapes,



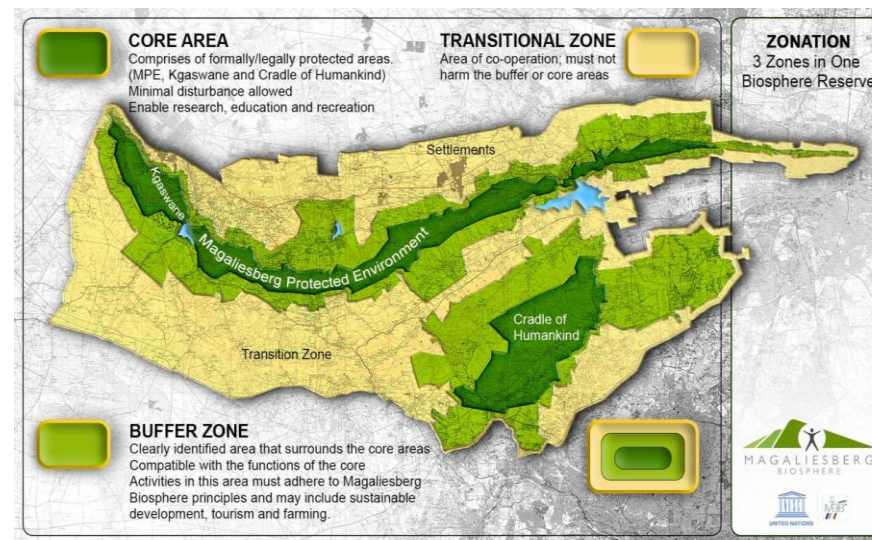
rich biodiversity, and historical heritage, all of which contribute to sustainable development and conservation efforts.

The Magaliesberg Biosphere however, spans portions of the North West and Gauteng provinces, with a significant portion falling within the Bojanala Platinum District Municipality. It extends across BPDM local municipalities such as Rustenburg, Kgetlengrivier, and Moretele, forming a vital natural corridor that connects rural and urban environments. The Magaliesberg Biosphere is characterized by unique geological formations, including some of the oldest mountains in the world, dating back over two billion years. It supports a diverse range of flora and fauna, including rare and endemic species. The biosphere also plays a crucial role in ecosystem services such as water purification, climate regulation, and soil conservation. Key conservation areas within the biosphere include:

- Pilanesberg National Park
- Kgaswane Mountain Reserve
- Vaalkop Dam Nature Reserve

These protected areas are essential for maintaining biodiversity, protecting endangered species, and supporting climate resilience in the region. The Magaliesberg Biosphere is also a vital contributor to the district's economic and social development. It provides opportunities in various sectors, including tourism, agriculture, and potentially research.

Figure 33: Magaliesberg Biosphere Outlook



Source: maricobiosreserve.org

3.3.15.2 Marico Biosphere Reserve

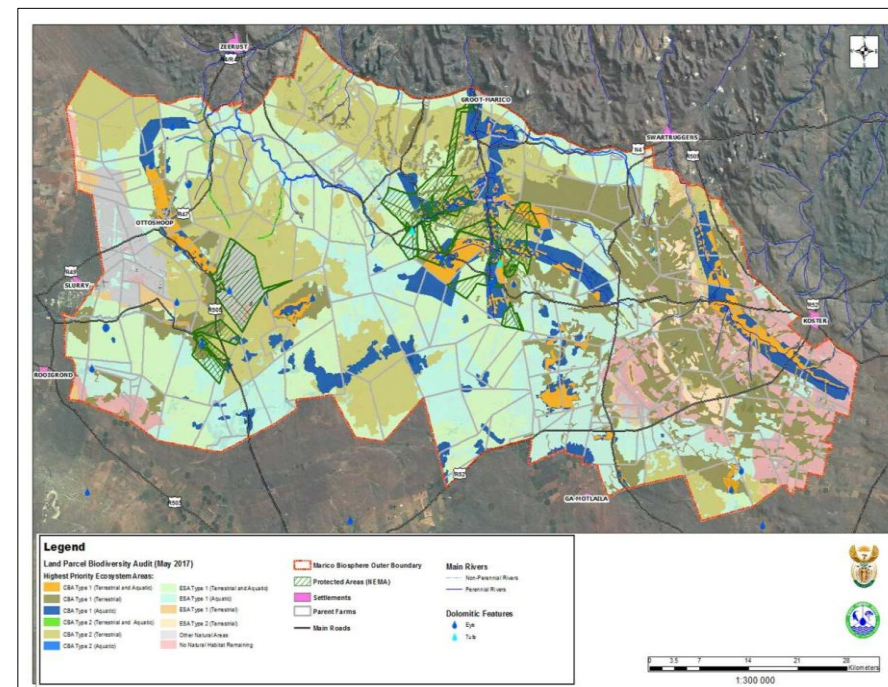
The Marico Biosphere Reserve, designated by UNESCO in 2018, is a critical ecological and socio-economic asset within the BPDM. Spanning the pristine landscapes of the North West Province, the reserve plays a pivotal role in biodiversity conservation, sustainable development, and water resource protection. Its inclusion in the BPDM SDF is essential to ensure a balance between environmental sustainability and economic growth, aligning with national and global conservation objectives.



Situated in the north-eastern part of the BPDM, the Marico Biosphere Reserve covers portions of the Ramotshere Moiloa Municipality in Ngaka Modiri Molema District Municipality and Kgetlengrivier Local Municipality in the BPDM. The reserve encompasses a variety of landscapes, including the dolomitic aquifers of the Marico River catchment, grasslands, savannahs, and critical wetland ecosystems. This region is characterized by its high ecological value, particularly as it is home to one of the last remaining free-flowing, uncontaminated river systems in South Africa the Marico River.

Given its strategic ecological role, conservation planning within the SDF must ensure minimal disruption to its sensitive habitats while promoting ecologically responsible land uses. The communities within and surrounding the Marico Biosphere Reserve are primarily dependent on agriculture, eco-tourism, and small-scale natural resource harvesting. The reserve presents opportunities for sustainable economic activities, including nature-based tourism, conservation agriculture, and cultural heritage tourism. The development of eco-tourism ventures, such as guided nature trails, birdwatching sites, and heritage tourism linked to the local Setswana culture, can contribute to economic diversification and job creation in rural communities.

Figure 34: Marico Biosphere Outlook



Source: maricobiosreserve.org

3.3.15.3 Biosphere Reserves Spatial Planning and Sustainable Development Considerations

The BPDM SDF must integrate the following spatial planning strategies to enhance the functionality and sustainability of the Biosphere Reserves within the BPDM.



- **Biodiversity Conservation Zoning:** Identifying core conservation areas, buffer zones, and sustainable use areas to regulate land use intensity.
- **Water Resource Protection:** Ensuring strict land use controls to safeguard the Biosphere Reserves' water quality and prevent pollution from mining, agriculture, and settlement expansion.
- **Sustainable Tourism Development:** Facilitating investment in eco-tourism infrastructure, including eco-lodges, community-based tourism initiatives, and interpretative centres.
- **Agricultural and Rural Development:** Promoting sustainable agricultural practices such as agroecology and permaculture to enhance food security while preserving natural habitats.
- **Infrastructure and Service Delivery:** Implementing environmentally sensitive infrastructure projects, such as renewable energy systems, sustainable sanitation, and improved road networks that do not compromise ecological integrity.
- **Conservation Management:** Strengthening environmental protection measures through improved land use policies and zoning regulations.
- **Community Involvement:** Promoting local participation in conservation and tourism initiatives to ensure equitable economic benefits.



3.4 BUILT ENVIRONMENT

3.4.1 Land Cover and Land Uses

Land cover generally describes the present physical make-up of a site of the area. Land use is measured at the landscape level by mapping land cover. The Bojanala Platinum District Municipality has its large proportion of the area covered by Natural Wooded Land which covers most parts of the municipality, making up a total of 51.37% (941 910.13 Hectare) of the land cover within BPDM (refer to map 24). This Natural Wooded Land is an area predominantly covered by naturally occurring trees and woody vegetation, with minimal human intervention. It includes forests, woodlands, and savannas where native tree species dominate, supporting biodiversity and ecological functions.

The Natural Grassland makes up the second most dominant land cover, accounting for 19.01% (348 496.4 Hectare) of the total Bojanala Platinum District Municipality land cover. This is an area that dominated by native grasses and herbaceous vegetation with little to no tree or shrub cover. Temporary crops, which are the cultivated plants that complete their life cycle within a single growing season or less than a year, requiring replanting after each harvest, make up the third largest proportion of land cover within the Bojanala Platinum District Municipality with 11.42% (209 406.48 Hectare) of the total

land cover of the district municipality. This highlights the significant reliance on agricultural activities within the municipality and reinforces the notion that agriculture also contributes and plays a significant role in the district municipality's economy. The Bojanala Platinum District Municipality has a fourth most dominant land cover dominated by the Fallow Lands & Old Fields, which are the previously cultivated areas that are currently left uncultivated, either temporarily or for an extended period. These Fallow Lands & Old Fields account for 8.97% (164 513.29 Hectare) which also highlights a significant decline in agricultural activities within the municipality. The Residential component also makes up a significant portion of the land cover within BPDM with 4.88% (89 543.48 Hectare) of the total land cover within the district municipality. The residential component includes the areas primarily used for housing and human habitation, and includes various dwelling types such as single-family homes, apartment complexes, and informal settlements.

The industrial component, which is also part of the main economic pillars within the district municipality accounts for 0.16% (2 857.62 Hectare) of the total district land cover. These includes facilities used for manufacturing, processing, storage, and other industrial activities within the district. The commercial component accounts for one of the least percentages of the land covers within the district municipality with



only 0.07% (1 277.63 Hectare) together with Transport which also accounts for 0.07% (1 218.51 Hectare) of the district municipality land cover. The remaining land cover classifications including Extraction Sites, Smallholdings, Surface Infrastructure, Urban Vegetation, Artificial Waterbodies, Permanent Crops and a few others collectively account for a total of 4.05% of the total BPDM land cover.

3.4.2 Land Cover Change

Based on the information from SANLC, the following has been noted in regards to the land cover change within the Bojanala Platinum District Municipality. The table below indicates the top ten major land cover change for the various typologies and the areas in hectares from which it changed from to the new land cover from the year 1990 to 2022.

Table 23: Major Land Cover Change within the BPDM from 1990 to 2022

CHANGE DESCRIPTION	AREA CHANGED (HA)
Grasslands → Natural Wooded Land	319,677 Ha
Thicket/Dense Bush → Natural Wooded Land	150,289 Ha
Natural Wooded Land → Grasslands	106,472 Ha
Shrubland → Natural Wooded Land	59,541 Ha
Shrubland → Grasslands	35,396 Ha
Commercial Annuals (Non-Pivot) → Natural Wooded Land	22,494 Ha
Cultivated Subsistence → Natural Wooded Land	18,568 Ha

CHANGE DESCRIPTION	AREA CHANGED (HA)
Thicket/Dense Bush → Grasslands	17,540 Ha
Commercial Annuals (Non-Pivot) → Commercial Annuals (Pivot)	14,668 Ha
Natural Wooded Land → Built-Up Residential	13,415 Ha

Source: South African Land Cover, 2022

As per the table above, it is evident that the most significant trend is the conversion of grasslands, thickets, and shrublands into natural wooded land. While some areas experienced the reverse natural wooded land being converted back to grasslands, showing a dynamic interchange between these land types. This might be due to land clearing, fire regimes, or agricultural expansion. Substantial areas of commercial and subsistence agriculture have also been replaced by natural wooded land, indicating declining agricultural activity in some parts of the district. While not the largest in area, the change from natural wooded land to built-up residential (13,415 ha) marks a clear signal of urban expansion into previously natural areas.

3.4.3 Bojanala SEZ

The Special Economic Zone (SEZ) program has been established in South Africa in order to accelerate the Industrial development in various areas within the country. The Bojanala SEZ has also been planned to be developed with a focus largely on the mineral beneficiation, mining, capital equipment, agro-processing and



renewable energy. This Bojanala SEZ is situated in Mogwase, Moses Kotane Local Municipality, within the Bojanala Platinum District of South Africa's North West Province. It spans 1,117 hectares in size, incorporating the existing Bodirelo Industrial Township and adjacent undeveloped land portions. The zone is strategically located near major transport routes R510 (linking Mogwase with Northam, Thabazimbi and Rustenburg) and R556 highways and the Pilanesberg International Airport (± 12 km away), enhancing connectivity to other key economic hubs like Rustenburg, Tshwane, and Johannesburg.

The Bojanala SEZ will also help to achieve the following objectives:

- This will introduce a diversification of the economy within the district municipality, By Driving industrialization through mineral beneficiation (focusing more platinum), mining machinery manufacturing, agro-processing, and renewable energy.
- It will also help to address the high unemployment rates by generating employment opportunities, particularly for local communities within the district.
- The proposed Bojanala SEZ development will also introduce a much-needed provision and upgrade of bulk infrastructure (water, roads, energy, rail) to support sustainable industrial growth.

- The SEZ will also leverage proximity to mining belts, tourism nodes (e.g., Sun City), and logistics networks to position the SEZ as a regional trade and manufacturing hub.

Key Components:

a. Industrial Focus Areas:

- Mineral Beneficiation - Processing platinum group metals (PGMs), which dominate the region's mining sector.
- Mining Machinery - Manufacturing and servicing equipment for the mining industry.
- Agro-Processing - Adding value to agricultural products, linking with local farming sectors.
- Renewable Energy - Solar, wind, and biogas projects to reduce reliance on Eskom's grid.

Infrastructure Upgrades:

- Water - New reservoirs, pump stations, and upgrades to bulk water pipelines (28km from Vaalkop Water Treatment Plant) and the construction of elevated storage tanks (4.5Mℓ west, 3Mℓ east) to ensure supply for industrial demand.
- Roads - Upgrading President Avenue, R510 intersections, and internal SEZ roads to accommodate heavy vehicles.



- Energy - Two new 132/22 kV substations, 132kV overhead lines, and renewable energy integration.
- Rail/Airport - Investigating rail links to Transnet's network and expanding Pilanesberg Airport for cargo logistics.

Sustainability Measures:

- Floodline studies (1:100-year flood protection) and erosion control during construction.
- Compliance with environmental regulations (e.g., National Water Act) and SPLUMA land-use principles.

The Bojanala SEZ has been Adopted by Moses Kotane Local Municipality Council in January 2023. It is expected to ensure economic growth by attracting private investment, further diversify the local economy beyond mining, and boosting exports. To largely contribute in creating skilled and semi-skilled jobs. Providing increased access to reliable water, energy, and transport networks to support future development. The Bojanala SEZ aims to transform the region into a competitive industrial and logistics hub, leveraging its strategic location, mineral resources, and upgraded infrastructure to drive long-term socio-economic benefits.

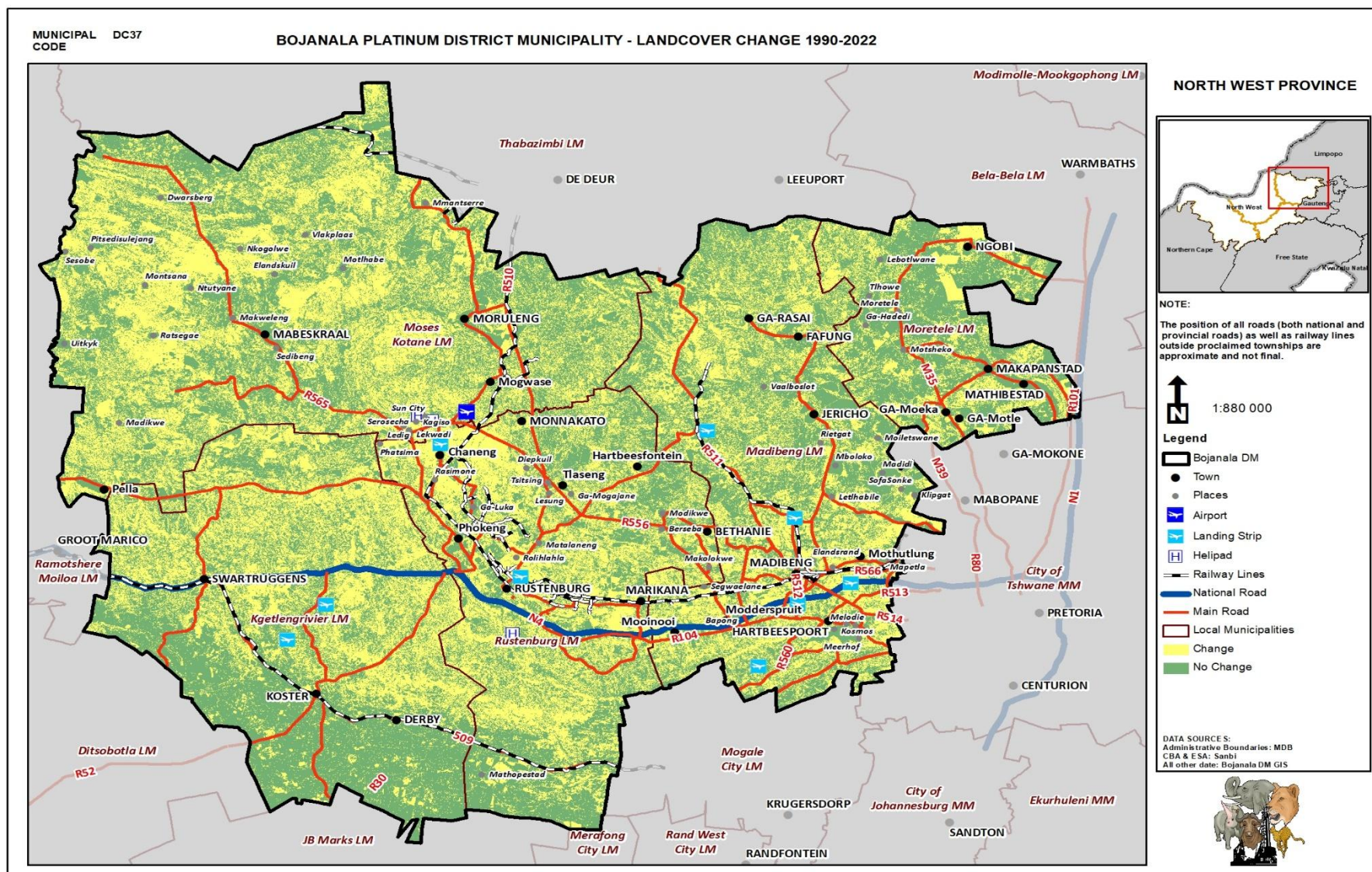
Figure 35: Locality plan of the Bojanala SEZ



Source: Bojanala SEZ Traffic Impact Study, Palama Consulting Engineers



Map 25: Land cover within the BPDM





3.4.4 Transport Movement Services

Transport is one of the crucial components of the economy impacting on the efficient development and the welfare of the populations. Efficient transport systems ensure that there are potential economic and social opportunities that results in subsequent broad positive effects such as better accessibility, employment and attraction of investments. Transportation and access to key locations, like job centres, are crucial in land use planning. A good transport system connects urban and rural areas. Travel challenges can be assessed in terms of time and distance. Walking distance is the most common measure used in urban planning. If a location is too far to walk comfortably, people will rely on other transportation options, like roads or railways.

3.4.4.1 Major roads

The road facilities coverage in the BPDM are fairly well established. The district municipality is traversed by one national route (N4 highway), which forms the foundation for future infrastructure and spatial development. In addition, a well-developed secondary road network occurs throughout the municipality, connecting urban areas and rural settlements. The BPDM has a total provincial road network of 4 193 km. Of this, approximately 40% (1 703 km) are tarred, while 2 490 km are gravel roads. In the Rustenburg and Madibeng

local municipalities, more than 50% of the provincial roads are tarred, while in the Moretele and Moses Kotane local municipalities, less than 25% of the provincial roads are tarred. The majority of the paved roads are in a fair to good condition, while gravel roads range from fair to poor condition. A total of 151 km (3.6%) of the road network in the BPDM is in a poor or very poor condition. The majority of these occur in the Madibeng (48%) and Rustenburg (34%) local municipalities.

N4 Platinum Highway

The N4 Platinum Highway serves as the main arterial road that traverses the Bojanala Platinum District Municipality, forming part of the Trans-Kalahari Corridor. This route connects Gauteng (Pretoria) to Rustenburg, Zeerust, and the Botswana border at Lobatse. The N4 route is essential for regional trade, facilitating the transportation of goods between South Africa and Botswana. Within Bojanala, the N4 serves as the backbone for mining logistics, particularly for the platinum belt, and enhances access to Rustenburg, a key economic center in the district.

R104

Running parallel to the N4, the R104 is an alternative route for local traffic within the area. It connects towns such as Brits, Mooi-nooi, and



Rustenburg, and is particularly significant for reducing congestion on the toll road sections of the N4. The R104 also supports agricultural transport, linking farming areas to markets within the district and beyond.

R510

The R510 connects Thabazimbi (in Limpopo Province) to Rustenburg, passing through the mining-rich areas of Northam and Amandelbult. This route is vital for the movement of mining equipment and minerals, particularly platinum, which is a key economic driver in the Bojanala Platinum District Municipality. Further north, the R510 extends toward Botswana border, supporting cross-border trade and tourism.

R511

The R511 runs from Thabazimbi (in Limpopo) to Brits via Hartbeespoort and the scenic Magaliesberg mountain range. This route is significant for tourism, as it provides access to popular destinations such as the Hartbeespoort Dam, Magaliesberg resorts, and various adventure tourism activities within the district municipality. The R511 also supports local agriculture and residential development in the Brits area.

R512

The R512 connects Brits to Lanseria (Gauteng), skirting the eastern side of the Hartbeespoort Dam. This route provides critical access to Lanseria International Airport and the northern suburbs of Johannesburg, supporting business and tourism-related travel. It is particularly popular among visitors exploring the Magaliesberg Biosphere Reserve.

R556

The R556 links Modderspruit with Sun City and Pilanesberg National Park further north, two of the district's most prominent tourism attractions. This route is crucial for the hospitality industry, providing access to luxury resorts, safari experiences, and conference facilities that attract both domestic and international tourists in the area.

R565

The R565 provides an additional route connecting Rustenburg to Sun City and the Pilanesberg National Park with important facilities such as the Royal Bafokeng Stadium, Moses Kotane Hospital and various other facilities that attract and connect people in the area. It enhances accessibility to the western parts of the district and supports tourism growth by creating easier access to the region's key attractions.



R566

The R566 routes is one of the main routes within the BPDM that runs from Brits to Rosslyn (Gauteng), a major industrial zone. This route is important for the manufacturing sector, facilitating the movement of goods between industrial hubs and supporting employment opportunities for residents in Bojanala and provides important linkage with the Gauteng region.

R52

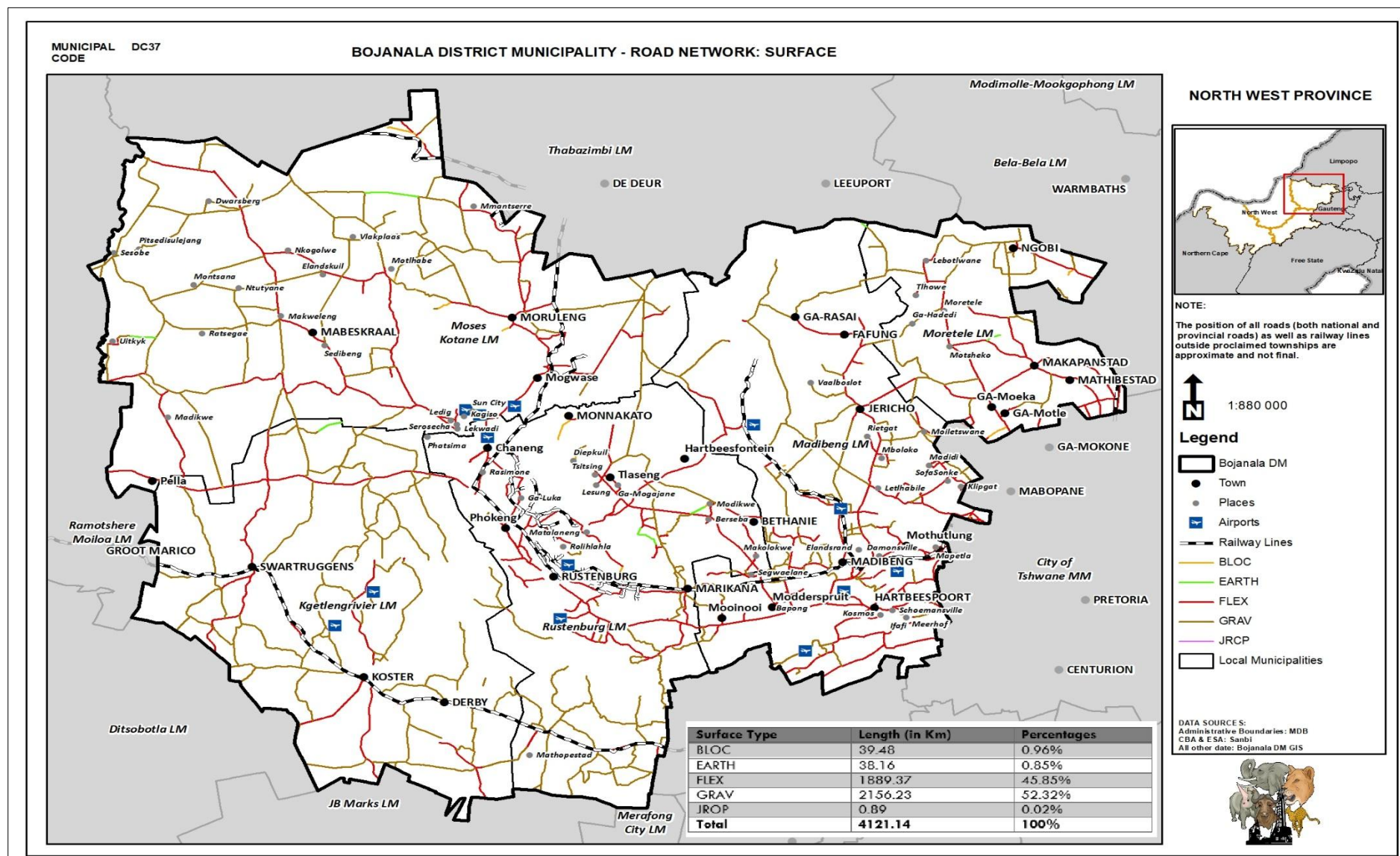
The R52 connects Rustenburg with Koster and Derby, through the N4, providing a link to agricultural areas in the southern parts of the district. This road also extends into Lichtenburg in the Ngaka Modiri Molema District Municipality, enhancing inter-district connectivity and supporting regional economic activity.

M35

The M35 roads extends from Soshanguve in Gauteng province towards the Ngobi area in Moretele local municipality, through various areas within the municipality such as Swartdam, Dikebu and Moretele area. It plays an important role in regional accessibility and local economic activity.



Map 27: Road Transportation Surfaces





3.4.4.2 Rail Facilities

The BPDm has two main inter-provincial rail lines that transverse the district municipality. The railway line connects Pretoria (in Gauteng Province) to Rustenburg via Brits, extending further to Sun City and Mogwase, as well as to Thabazimbi in Limpopo Province. One railway line connects Johannesburg (in Gauteng Province) to Zeerust, passing through Derby, Koster, and Swartruggens (Borolelo). Additionally, another railway branch diverges from the Pretoria–Brits line, extending northward towards Beestekraal. The rail network in BPDm is mainly used for freight services and most passenger's rail. Scheduled mainline freight services are operated by Transnet from Johannesburg through the North West province to the Botswana border. Metro Rail Passenger Service between DeWilt and Pretoria, as well as Mabopane and Pretoria provides the only commuter rail service in the area. Although it recently faced challenges due to nationwide vandalism during the Covid-19 lockdown, the Passenger Rail Agency (PRASA) has been undertaking repairs and infrastructure rehabilitation.

3.4.4.3 Air Transport

Pilanesberg Airport

The Pilanesberg Airport, located near the Pilanesberg National Park, primarily serves tourists visiting the park and surrounding areas. It has

a 2 700 meters long runway. The airport used to have international status until this status was moved to the Mafikeng International Airport, and therefore, this has led to the Pilanesberg Airport being currently used mostly for general aviation and charter flights.

Rustenburg Aerodrome

The Rustenburg Aerodrome with a 1 225 meters long runway, is situated in Rustenburg, this aerodrome supports general aviation activities and provides facilities for private and charter flights. While it does not have regular scheduled commercial services, it plays a crucial role in supporting local businesses and tourism through general aviation operations

3.4.4.4 Public Transport

The municipality has several transport hubs including the Rustenburg Transport Hub and the Brits Transport Hub which provide integrated transportation services connecting it to the surrounding municipalities and provinces. Bojanala has Bus and Taxi companies operating in the municipality, providing transportation services to local commuters.

3.4.4.5 Non-Motorised Transport (NMT)

The status quo of Non-Motorised Transport (NMT) in the BPDm reflects a complex interplay of infrastructure challenges and socio-economic factors. NMT, which encompasses modes such as walking, cycling, and animal-drawn transport, is crucial for providing mobility in this



predominantly rural area where public transport options are limited. Despite the recognition of NMT's importance in local transport policies, the implementation remains inconsistent due to inadequate budget allocations and underdeveloped road infrastructure, particularly in rural regions where many residents rely on these modes for daily commuting and accessing essential services. While there is a growing awareness of the need to improve NMT infrastructure to enhance safety and accessibility, challenges such as poor road conditions and limited funding continue to impede progress.

3.4.5 Settlements Typology

The Bojanala Platinum District Municipality is largely characterised by Sparse Rural settlements, covering vast portions of the district. These areas have low population densities and are primarily used for agriculture and conservation. These areas are also characterised by minimal settlement, limited services and infrastructure development.

The BPDm is also characterised by a fair portion of the Dense Rural areas, which are highly populated rural villages with some level of formal infrastructure and services such as Mabeskraal, Mathibestad, Moruleng, Jericho etc.

The BPDm also have fairly few portions characterised as Towns, which are the major economic centres in the district, providing essential services, industries, and employment opportunities. These include areas

such as Rustenburg, Brits, Koster, Mogwase etc. The areas have Well-developed infrastructure, better access to services which is also associated with their higher population densities as compared to other typologies within the BPDm. (Refer to map 28, Settlement typology). The BPDm, in reference to the developed Bojanala RDSP 2023, a hierarchy of towns for the district municipality in terms of the CSIR Settlement Typology tool, which assists in the analysis of settlements. It was established to enable understanding and analysis of the network of settlements, towns and cities and the hierarchical and functional relationships between them, especially related to government and economic service provision and migration. The following is the settlement typology according to the CSIR.

Table 24: CSIR Settlement Typology (Definitions)

Regional Location and Service Role	Description Of Functional Town Area Types
City Region	Population: >1 million people; Morphology: Large urban conurbations; Economy: Diverse
Cities and very large regional centres	Population: > 500,000 people; Morphology: Dense urban areas; Economy: Service related
Large Regional centres	Population: 10,000 – 300,000 people; Morphology: Regional node
Regional centres	Population: < 100,000 people; Morphology: Regional node consisting of interconnected settlements



Service towns	Population: 15,000 – 100,000 people; Economy: Providing economic and social service anchor role to hinterland
Small Service towns	Population: < 20,000 people; Morphology: Monochrome small town; Local Service role: Playing an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km from the town in sparser areas; Economy: Government and community service
Rural Service Settlement	Population: Varied in nodal settlement, large population in direct hinterland; Morphology: Emerging nodes of consolidation in Dense Rural Settlements; Local Service role: Strategically located to play an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km from the town in sparser areas
Small towns	Population: < 20,000 people; Morphology: Monocentric small towns, often apartheid landscape double centre towns; Economy and service role: Primarily serve local population and/or 'niche' economic activity such as mining, tourism or fisheries
Rural settlement areas and villages	This area incorporates both formal rural settlement area as well as Traditional Authority Rural Settlement Area. Both have very small formal service economy activities
Sparsely populated rural areas	Sparsely populated areas (meso zone areas without rural settlements)

Source: Adopted from http://stepsatest.csir.co.za/typology_table.html

3.4.5.1 Settlement Hierarchy

The hierarchy of settlement was identified as follows within the BPDM with alignment to the CSIR typology tool.

Table 25: Settlement Hierarchy within BPDM

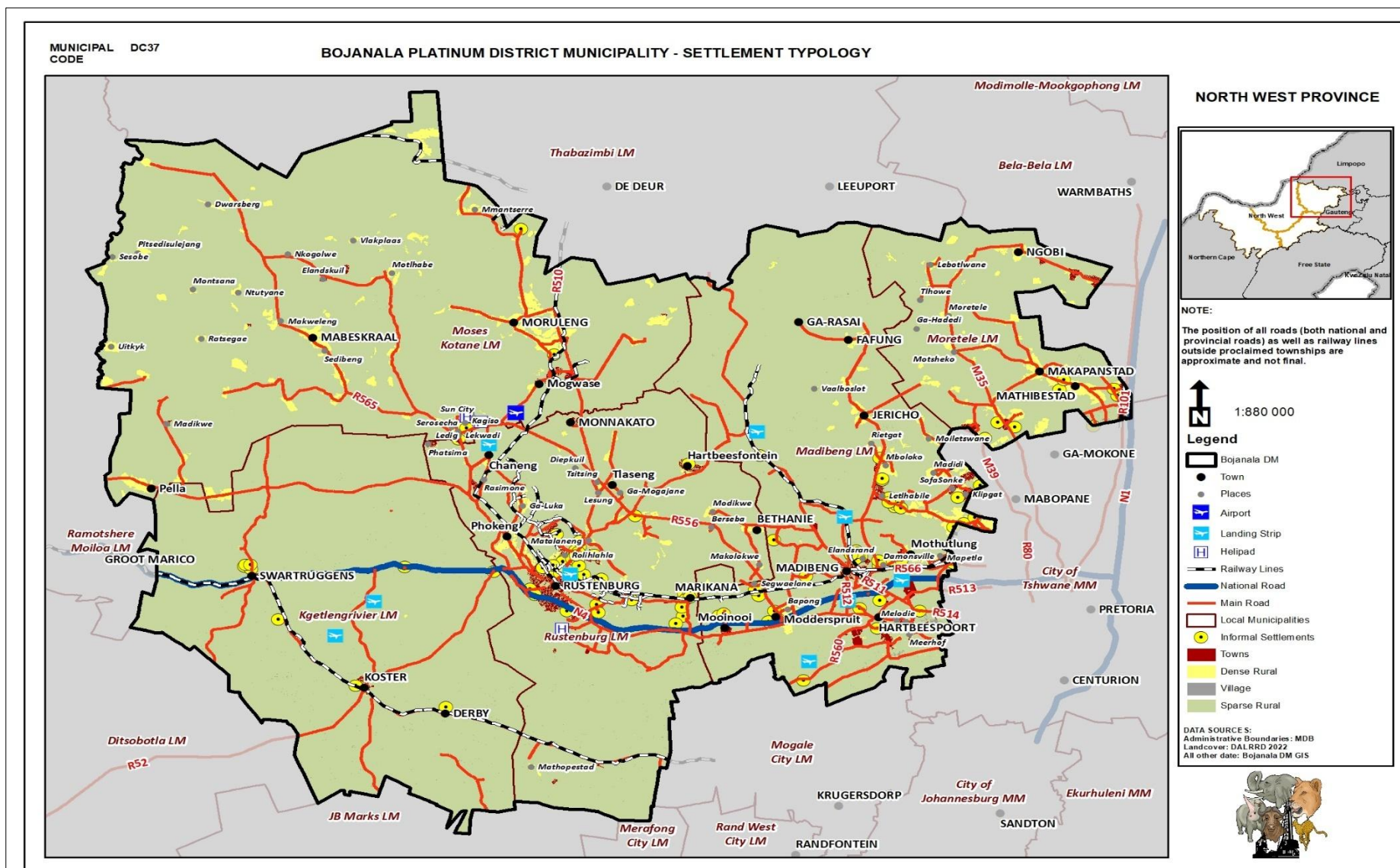
Settlement Name	Service Role
Rustenburg	City / Very Large Regional Centre
Brits	Large Regional Centre
Mogwase	Service Town
Phokeng	Service Town
Boitekong	Service Town
Ledig	Service Town
Moruleng	Service Town
Marikana	Small Service Town
Chaneng	Small Service Town
Koster	Small Service Town
Swartruggens	Small Service Town
Mabeskraal	Rural Service Settlement
Tsitsing	Rural Service Settlement
Pella	Rural Service Settlement
Madikwe	Rural Service Settlement
Monnakato	Rural Service Settlement
Thekwane	Rural Service Settlement
Bethanie	Rural Service Settlement
Ga-Luka	Rural Service Settlement
Lethabong	Rural Service Settlement
Phatsima	Rural Service Settlement



Jericho	Rural Service Settlement
Lethlabile	Rural Service Settlement
Mathibestad	Rural Service Settlement
Makapanstad	Rural Service Settlement
Derby	Small Town
Schoemansville	Small Town
Ga-Rasai	Rural Settlement Area & Villages
Fafung	Rural Settlement Area & Villages
Dwarsberg	Rural Settlement Area & Villages
Nonceba	Rural Settlement Area & Villages
Lesetlheng	Rural Settlement Area & Villages
Molatedi	Rural Settlement Area & Villages
Obakeng	Rural Settlement Area & Villages
Seolong	Rural Settlement Area & Villages
Skuinsdrif	Rural Settlement Area & Villages
Ga-Motle	Rural Settlement Area & Villages
Moeka	Rural Settlement Area & Villages
Syferkuil	Rural Settlement Area & Villages
Modikwe	Rural Settlement Area & Villages
Lekgalong	Rural Settlement Area & Villages
Mathopestad	Rural Settlement Area & Villages
Syferbult	Rural Settlement Area & Villages

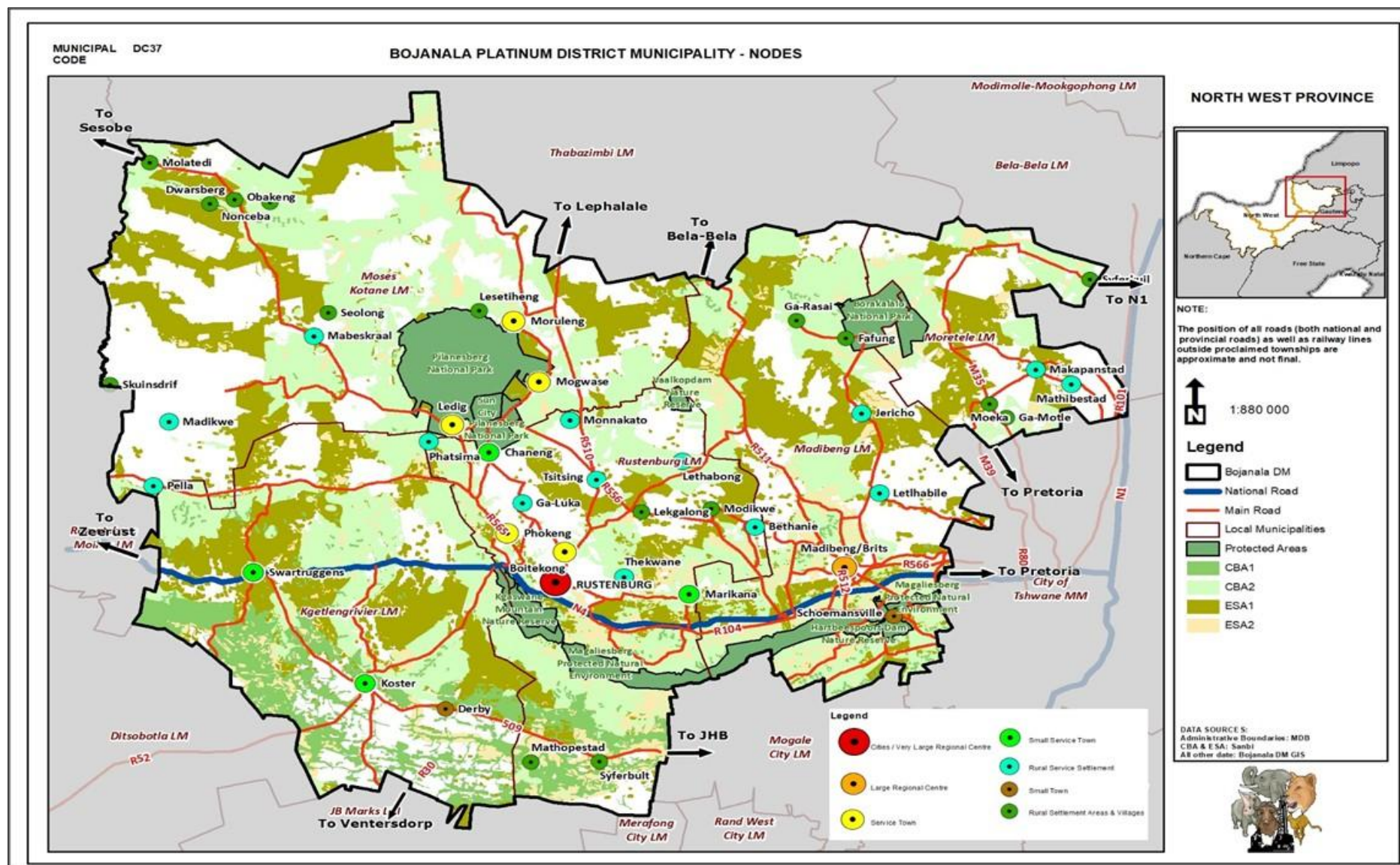


Map 28: Settlement Typology





Map 29: Settlement Hierarchy





3.4.6 Land Tenure and Land Ownership

Land tenure describes the way in which people own or occupy various plots of land. Land ownership plays a critical role in development as it influences access to land and affordability. Often, privately owned land is kept for investment (speculative) purposes and the owners are not willing to sell it for social development projects and hence its sale and sale price is market driven. The land tenure system in the municipality can be influenced by various historical, social, and economic factors, reflecting the legacy of land dispossession and apartheid policies. In recent years, efforts have been made to address land reform and allocation, aiming to empower local communities and redress past injustices. Challenges remain, including bureaucratic hurdles and conflicts over land use, particularly in areas where mining interests intersect with agricultural and residential needs (Conflicting land uses). The local government plays a crucial role in mediating these issues, striving to create a balanced approach to land tenure that recognizes both the right to land for local inhabitants and the economic potential that mineral wealth brings to the region. This dynamic environment continues to evolve as stakeholders work towards sustainable land management practices that benefit all communities in the municipality.

According to the BPDM RDSP, 2023, the district is spread over former homeland areas, commercial farms, towns and semi urban areas, with large areas of land under the custodianship of traditional authorities. The Moses Kotane and Moretele municipal regions have got the largest share of land under traditional jurisdiction. Large tracts of land are also under tribal control in RLM and MDLM. According to the BPDM EMF, 2018, the following was determined about the settlement type and land tenure status within the local municipalities of the BPDM.

Moses Kotane Local Municipality

Approximately 92% of households in the municipality reside in tribal and traditional lands, with only 7.5% staying in urban areas. Nearly 59% of households in the municipality own their houses, which are fully paid and approximately 21% of occupants occupy rent free.

Kgetlengrivier Local Municipality

Approximately 67% of the households in the municipality lives in urban areas and the remainder on private farms. Nearly 31% of households own their fully paid houses, while nearly 36% of households occupy their houses rent free.



Madibeng Local Municipality

More than 70% of the population is located in rural villages and farms and the remainder in urban areas. 50% of households own fully paid houses, while nearly 29% of occupants rent accommodation.

Rustenburg Local Municipality

Approximately 68% of households in the municipality resides in urban areas and 30% in tribal and traditional land. Approximately 22% of households own fully paid houses, while approximately 45% of households rent accommodation and 20% occupy rent free stands.

Moretele Local Municipality

More than 88% of the population is located in traditional areas, with the remainder residing in urban areas. More than 80% of households live in formal dwellings and about 15% occupy informal dwellings. Approximately 72% of houses owned is fully paid and nearly 24% of occupants occupy houses rent free.

3.4.7 Land reform

The legacy of colonialism and apartheid has resulted in a highly unequal distribution of land ownership, with a small minority of white commercial farmers holding most of the land. Most of the black population have limited or no access to land, which has contributed to

high levels of poverty and inequality. To respond to this situation, the South African government has implemented a land reform program aimed at addressing historical injustices by transferring land ownership from white commercial farmers to black farmers and communities. This program includes various mechanisms such as land restitution, redistribution, and tenure reform.

In BPDM, the government has discovered a few land reform projects aimed at increasing black ownership and access to land. These projects include the distribution of state-owned land, the acquisition of land from willing sellers, and the provision of support and resources to black farmers and communities. However, land reform in BPDM has been slow and complex, with several challenges such as lack of resources, poor infrastructure, and bureaucratic obstacles. Therefore, progress has been limited, and most of the land in the district remains in the hands of white commercial farmers.

3.4.8 Settlement Vulnerability (Per Bojanala Platinum District Municipality Climate Risk Profile Report based on the GreenBook)

Settlement-level vulnerability was assessed as follows within the context of a specific local municipality, comparing vulnerabilities among the settlements within that municipality as per the Bojanala



Platinum District Municipality Climate Risk Profile Report based on the Greenbook (2024).

Kgetlengrivier Local Municipality

The major settlements in this municipality are Koster, Swartruggens and Derby. The settlement facing the greatest growth pressure is Swartruggens, which also has very high socio-economic vulnerability. Koster has the greatest regional connectivity vulnerability in the municipality, while Derby has the greatest service access vulnerability in the municipality.

Local Municipality of Madibeng

The major settlements in this municipality are Brits, Hartebeespoort, Letlhabile, Maboloka and Mooiooi. Brits is facing the greatest growth pressure in the municipality. Hartebeespoort has both a very high service access and economic vulnerability. Maboloka has the highest socioeconomic vulnerability in the municipality, combined with a very high environmental vulnerability.

Moretele Local Municipality

This municipality is predominantly made up of traditional areas, which also faces the greatest growth pressures. The major settlements are Mogogelo, Mathibestad, Makapanstad and Lebotlwana. Lebotlwana has very high economic, socio-economic and environmental

vulnerability. Lebotlwana together with Makapanstad and Mogogelo, is also subject to poor regional connectivity.

Moses Kotane

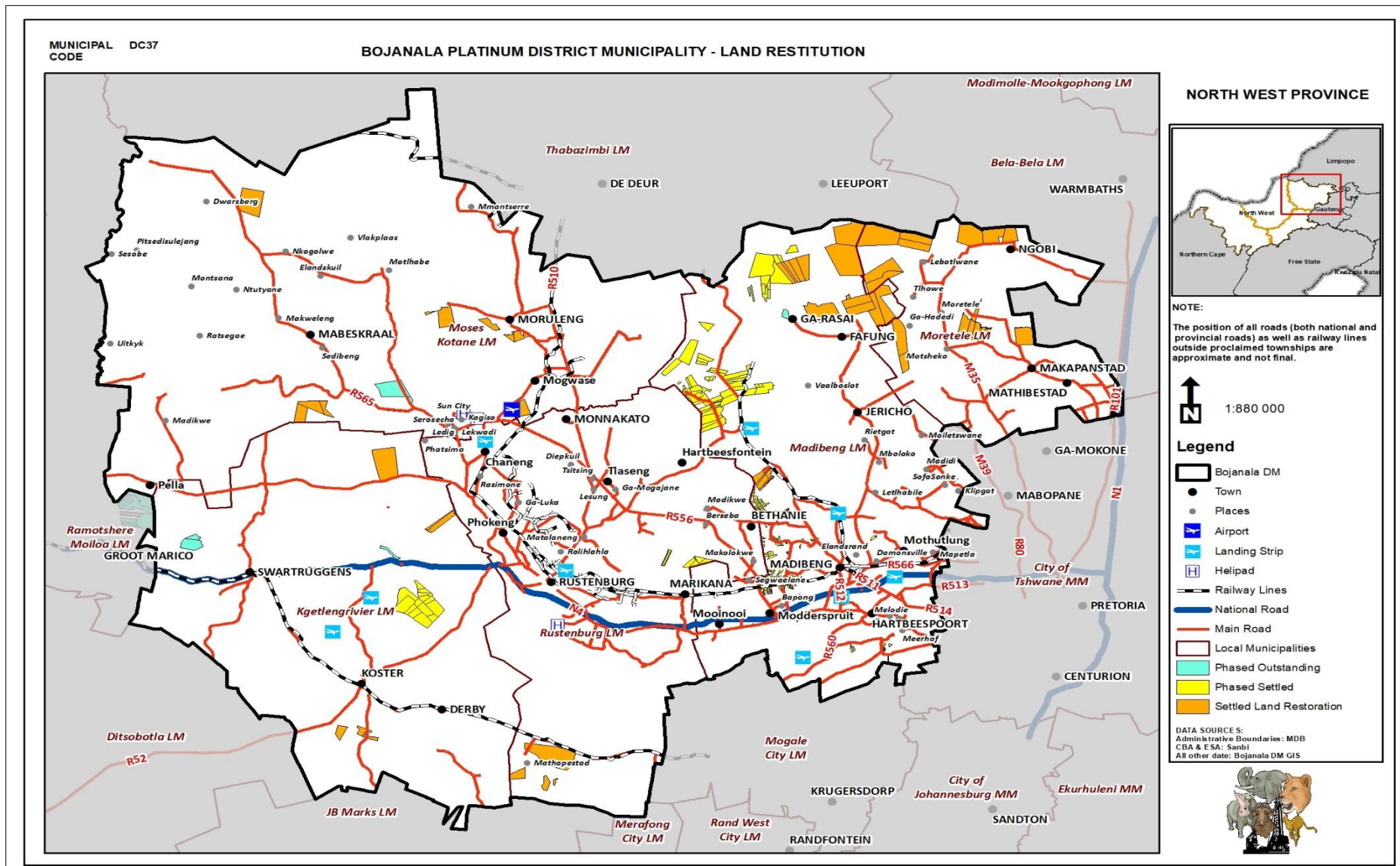
This municipality is mostly rural in nature, with over 90% of the municipality characterized by traditional areas. The two major settlements are Mogwase and Madikwe. Other smaller settlements are Ledig, Moretele, Moruleng and Makgope. Madikwe faces very high economic, socio-economic, and environmental vulnerability. Ledig and Makgopa experience the highest growth pressure in the municipality.

Rustenburg Local Municipality

The major settlements in this municipality are Rustenburg, Boitekong, Hartbeesfontein, and Marikana. Rustenburg and Boitekong experience the highest growth in the municipality. Boitekong also faces high environmental vulnerability. Hartbeesfontein has the highest socio-economic vulnerability in the local municipality.



Map 30: Land restitution occurrences within the BPDM





3.4.9 Housing

Housing has been identified as a critical priority in the BPDM, as outlined in its IDP for 2023/2024. The district was determined to be encompassing of 531 492 households which ranks first compared to all district municipalities within the North West Province. This is an increase of 29 806 households (5.94%) compared to the determined 501 686 number of households recorded during the census 2011.

It has been mentioned that lack of a coherent and effective housing strategy for the district has resulted in the proliferation of informal settlements, ad-hock development of housing, and urban sprawl, especially in the north-eastern areas in the MLM, RLM, and MKLM notably, 14,7% of households reside in informal dwellings, a figure significantly higher than the national average of 8,1% people who reside in informal settlements. The responsibility for housing within BPDM primarily falls under the Provincial Department of Human Settlements. In accordance with Section 2 of the Housing Act, Act 107 of 1997, all levels of government are mandated to prioritize the housing needs of the poor. Housing development within the district adheres to principles that include providing a broad range of housing and tenure options, ensuring affordability and sustainability, integrating development planning, and administering processes transparently and equitably. The district's population has been

experiencing growth, with a recorded population of 1 624 144 individuals during the Census 2022, which is an increase of 7.74% (116,639) from the recorded population of 1 507 505 individuals during the Census 2011. This growth underscores the increasing demand for adequate housing solutions. Furthermore, housing development must adhere to the following principles:

- Providing a broad range of housing and tenure options where feasible,
- Ensuring affordability and sustainability from economic, fiscal, social, and financial perspectives,
- Being based on integrated development planning,
- Administering the process transparently, accountably, and equitably, while upholding good governance practices.

3.4.9.1 Housing Backlog

In 2005 the BPDM already had a massive housing backlog of approximately 101 114 units. The bulk of which were located in the RLM and MDLM. In 2017 this number has been reduced to approximately 64 000 units. In terms of housing backlogs, the district faces challenges in addressing housing backlogs. To address most of the housing backlog within the BPDM, Formalization and Upgrading of



Informal Settlements is needed, together with the provision of basic services.

3.4.9.2 Unlawful Land & Occupancy

In general, the unlawful land occupation refers to the unauthorized use or occupation of land, typically without the consent of the landowner. This is particularly prevalent throughout South Africa and is often associated with informal settlements and housing shortages. A few of the contributing factors to unlawful land occupation is rapid urbanization and population growth that usually leads to significant housing backlogs, prompting individuals to occupy available land informally. The lack of a coherent and effective housing strategy within the BPDm has resulted in the proliferation of informal settlements, ad-hock development of housing, and urban sprawl in some areas especially in the north-eastern areas in the MLM, RLM, and MKLM. This growing concern of unlawful land occupation necessitates careful planning and intervention, as it can subsequently lead to significant legal disputes, challenges in resource management, and boundary conflicts concerning the affected land.

Bojanala District Municipality has the highest number of informal settlements (107) and households who live in the informal settlements with almost half (48,86%) of the informal settlements in the province located in this District out of the 219 informal settlements identified

within the North West Province. However, despite these numbers, the least number of upgrades is in Bojanala District with only 10 out of its one 107 informal settlements currently undergoing formalisation.

The informal settlements in the BPDm follows a clear outline, with high clustering near urban centres, mining areas, and major transport routes, while more dispersed settlements appear in rural and agricultural zones. The most closely concentrated informal settlements are found Rustenburg in Rolihlahla, Marikana, and around Brits area where platinum mining drives economic activity but lacks sufficient formal housing.

Another major cluster is in MDLM, where informal settlements align with key transport corridors like the R512 and R514, reflecting growth driven by mining, tourism, and agriculture. Informal settlements in KRLM are more dispersed, with clusters around Swartruggens (Borolelo area) and just a few in Koster, Derby and one in Moedwil. Many settlements align with major roads like R556, R510, R512, and N4, emphasizing accessibility's role in growth. This distribution highlights the link between mining, employment, and informal housing pressures, alongside challenges in service delivery and land-use management.



Table 26: Distribution of informal settlements by local municipality

Municipality	Number of Settlements	% of IS in Province	Estimated households	% Households in Province	IS in Formalisation Process
Kgetlengrivier	9	4,11%	3 030	1,43%	1
Madibeng	50	22,83%	62 697	29,58%	1
Moses Kotane	5	2,28%	5 111	2,41%	0
Moretele	8	3,65%	7 588	3,58%	0
Rustenburg	35	15,98%	74 698	35,24%	8

Source: North West Wide Upgrading Strategy for Informal Settlements, 2024

To address the challenges introduced by the informal settlements, spatial proposals will focus on identifying areas suitable for residential use or for the relocation of unlawfully occupied residents. This approach will align with broader planning processes aimed at alleviating the impacts of unlawful land occupation. Additionally, some of these unlawfully occupied areas will be targeted for formalisation and in-situ upgrading, including demarcation and formalisation projects. This strategy seeks to integrate these areas into formal land use frameworks, ensuring a more organised and sustainable approach to land management.

3.4.9.3 Priority Human Settlements and Housing Development Areas (PHSHDA)

The Priority Human Settlements and Housing Development Areas (PHSHDAs) Programme was introduced in 2019, which identified and gazetted selected areas to be prioritised for housing development using an intergovernmental cooperation strategy as well as integrated planning, coordinated programme implementation and fast-tracked housing delivery. The intention is to use housing delivery in the PHSHDAs as a tool to restructure and revitalise towns and cities, whilst simultaneously boosting the local economy and creating much-needed employment for households. North West Province has 14 gazetted PHSHDAs, of which many of the informal settlements in the province are located within these priority development areas (PDAs), particularly in the BPDm, where 55 informal settlements are located within PDAs.

The Priority Human Settlements and Housing Development Areas (PHSHDAs) within the Bojanala Platinum District Municipality have been identified as key zones for accelerated human settlement development, particularly in response to the district's high levels of informal settlements and the need for spatial transformation. These areas are designated under the national Housing Act and are intended to direct coordinated public investment, including infrastructure, land



acquisition, and housing delivery, towards locations where the need for integrated human settlements is most urgent.

The table below indicates the PSHDAs within the BPDM.

Table 27: PSHDA Within the Bojanala Platinum District Municipality

LOCAL MUNICIPALITY	PHSHDA NAME	MAIN PLACES	WARD NUMBER
Madibeng	1. Letlhabile & Maboloka Development Areas	Letlhabeng, Letlhabile-A, B, C, D, E, F, K, I, Maboloka	4, 5, 6, 9, 11, 12, 14, 38
Madibeng	2. Mooloooin N4 Corridor & Sonop Development Areas	Bokfontein, Mooloooin	25, 26, 27, 28, 31, 32, 40
Madibeng	3. Oukasie & Mothutlung Development Area	Brits, Damonsville, De Wildt Agricultural Holdings, Elandsrand, Hartbeespoort, Letlhabile-B, Mothutlung-A, Oukasie, Primindia	10, 18, 19, 20, 21, 22, 23, 29
Madibeng	4. Sunway Housing Dev. Area	La Camargue, Meerhof, Melodie AH, Sunway Village, Xanadu	20, 21, 22, 23, 29
Moses Kotane	5. Mogwase/Mankweng/Sp	Atamelang, Bapong, Belaing, Dikgabong, Disake, Ga-Ramosidi, Kraalhoek,	5, 7, 29, 34

LOCAL MUNICIPALITY	PHSHDA NAME	MAIN PLACES	WARD NUMBER
	itskop Development Area	Mantersere, Mogwase, Mogwalaneng, Moyane, Sefikile, Moses Kotane Rural	
Moses Kotane	6. Sun City/Ledi/Mogwase Corridor	Sun City, Mogwase Estate, Ledi, Mogwase, Mabele-a-Podi, Moses Kotane Rural	33, 34, 35
Rustenburg	7. Rustenburg/Boitekong/Mankana Development Area	Azalea Park, Boitekong, Bokamoso, Cashan, Ikemeleng, Lapologang, Marikana, Meriting, Paardekraal, Rustenburg, Safarituine, Seraleng, Waterkloof East, Waterkloof Hill, Waterval East	34, 35, 37, 43–45

Source: North West Wide Upgrading Strategy for Informal Settlements, 2024

Table below indicates the depicts ongoing projects under the PSHDA programme that are being implemented in the North West, particularly integrating informal settlements.



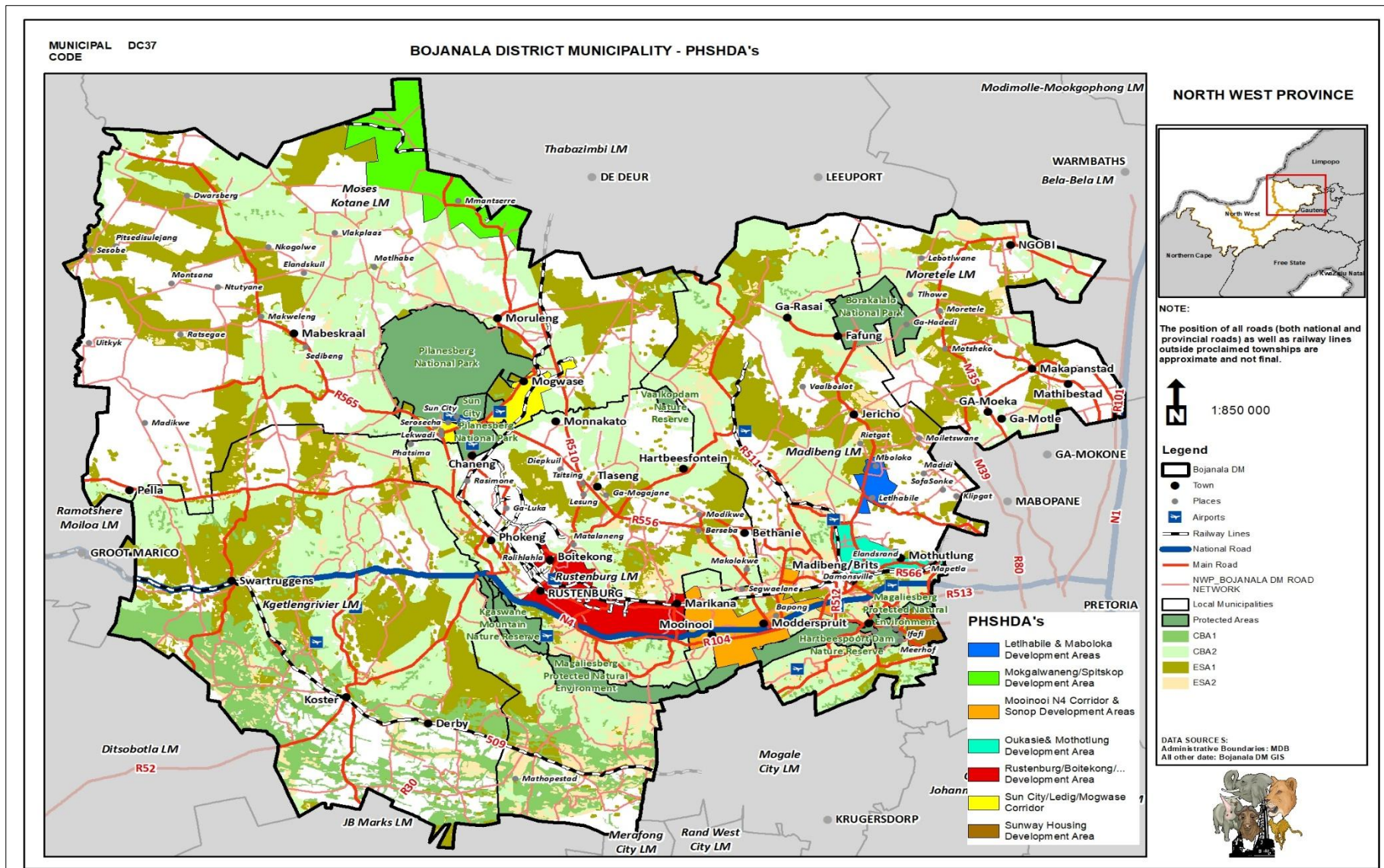
Table 28: Ongoing Projects under the PSHDA

Municipality	Settlement Name	Project	Status	Implementing Agent
Madibeng	Lethlabile B	Lethlabile B 119 Structures	Implementation - on hold	
	Lethlabile I	Lethlabile Block I Phase 2 to Phase 1	Pre-planning	
	Lethlabile G	Lethlabile Block G 500 Top Structures	Top structures	
	Oukasi	2016/17 Madibeng Oukasi – 500 walkups	Land acquisition	
	Damonsville X3	Township establishment	Planning	
Moses Kotane	Sefikile	Planning support to Traditional Authority by way of Local Area Plan	Planning	HDA, LM, DLRRD
	Unit 8B Mogwasi	Unit 8B development project	Internal services	Moses Kotane
	Ledig	Assess Bakubungu/Ledig mixed use development tenure model	Planning	NWDHS

Source: North West Wide Upgrading Strategy for Informal Settlements, 2024



Map 32: Identified PSHDAs within the BPDM





3.4.9.4. Human settlements and activities within the sensitive zones.

The BPDM encompasses diverse landscapes, including CBAs and water bodies, which are vital for maintaining ecological balance and providing essential ecosystem services. However, human settlements and activities within these sensitive zones pose significant environmental and safety challenges, such as biodiversity loss, increased flood risks, ecosystem disruptions, and difficulties in service provision.

BPDM comprises various Critical Biodiversity Areas (CBA1 & CBA2) and Ecological Support Areas (ESA1 & ESA2), which play a vital role in maintaining biodiversity, ecosystem functions, and environmental resilience. However, human settlements both formal and informal, have increasingly encroached into these ecologically sensitive regions. These settlements are distributed unevenly across the district, influenced by factors such as economic activities, infrastructure, historical settlement patterns, and natural geographic constraints. Areas with the highest concentration of settlements in ecological sensitive zones includes Rustenburg municipal area, this region has a high density of both formal and informal settlements inside CBA and ESA zones, which may be highly influenced by the rapid urbanization due to mining activities and presence of vast economic opportunities.

The Madibeng Municipal area, particularly Hartbeespoort, Brits, and their surroundings, has a high concentration of settlements within ecologically sensitive zones. This is largely influenced by the presence of the Hartbeespoort Dam, a key tourism attraction that also drives real estate demand and tourism-based economic activities. Additionally, the region's economic dynamics are further shaped by the presence of mining activities.

Kgetlengrivier municipal area also have a number of settlements in ecological sensitive zones as it also has a relatively large CBA and ESA coverage. This includes a concentration of settlements in the Swartruggens, Koster and Mazista areas. The Moretele and Moses Kotane Municipal areas have a relatively lower presence of settlements in ecologically sensitive zones. In the MKLM, settlements are primarily located around Ledig, Sun City, and Sefikile, while in the MLM, they are concentrated around the Ga-Motle and Ga-Monama areas. To address the challenges associated with the settlements located within most ecological sensitive zones such as habitat destruction, pollution of waterbodies, and loss of biodiversity. The BPDM can consider implementing the following measures:

a. Flood Protection Infrastructure

- **Floodplain Management:** Implement floodplain zoning to restrict development in high-risk flood areas, thereby minimizing potential damage and preserving natural



floodplain functions.

- **Wetland Restoration:** Restore and enhance wetlands to improve their capacity to absorb excess water, acting as natural buffers against flooding. The wetlands within BPDM are currently under threat from mining, agriculture, and inappropriate development, necessitating urgent conservation efforts.

b. Drainage System Improvements

- **Stormwater Management:** Upgrade and maintain stormwater drainage systems to effectively handle heavy rainfall and reduce waterlogging. This includes regular maintenance to prevent blockages and the incorporation of sustainable urban drainage systems.

c. Access Roads

- **Infrastructure Resilience:** Enhance the design and construction of access roads to ensure they remain functional during adverse weather conditions, facilitating safe evacuation and access for emergency services.

d. Green Infrastructure

- **Permeable Surfaces:** Promote the use of permeable pavements and other green infrastructure solutions to manage stormwater runoff, reduce surface flooding, and recharge groundwater.

- **Urban Greening:** Encourage the development of green spaces, such as parks and green roofs, to enhance urban resilience against climate-related hazards.

e. Environmental Management Framework (EMF)

- Ensure the strategic implementation and constantly up to date EMF to guide sustainable development within the district, ensuring that environmental considerations are integrated into land-use planning and decision-making processes. This framework has been largely helpful in managing development pressures and align spatial plans effectively.

f. Community Engagement and Education

- **Awareness Programs:** Conduct educational campaigns to raise awareness about the importance of CBAs and the risks associated with settling in flood-prone areas, fostering community support for conservation initiatives.

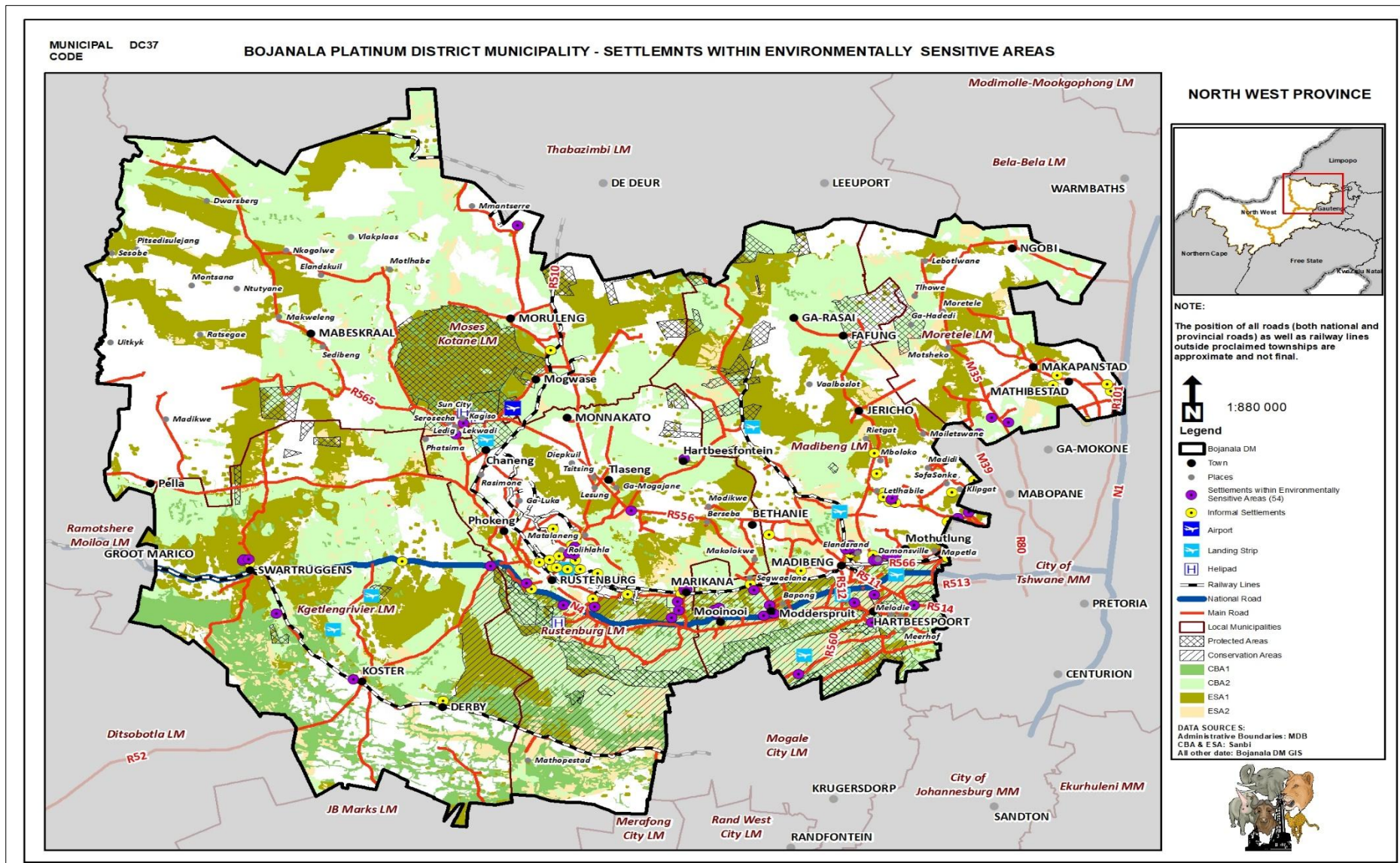
g. Policy Enforcement

Regulatory Measures: Enforce existing environmental regulations and develop new policies as needed to prevent unauthorised developments in sensitive areas, ensuring compliance through regular monitoring and inspections.

By implementing these strategies, local authorities can better address the needs of households in critical areas and effectively mitigate the risks associated with proximity to water bodies.



Map 33: Settlements within Environmentally Sensitive Areas





3.4.10 Basic Infrastructure Services

3.4.10.1 Water

It is important to note that unlike other district municipalities in the North West Province, BPDM is notably not a Water Service Authority because the water function has been directly assigned to local municipalities. However, the district has undertaken certain bulk water and sanitation related functions as part of providing support to local municipalities such as MKLM, KRLM, MDLM, RLM, and MLM.

3.4.10.1.1 Rustenburg Local Municipality

- Water Scheme in RLM

According to the RLM 5 Year Water and Sanitation Reliability Service Delivery Implementation Plan, Rustenburg Local Municipality has the following water schemes: ***Vaalkop Bulk Water Scheme – Southern, Vaalkop Bulk Water Scheme – Western, Odi Water Scheme, Rustenburg BWS – Tlhabane, Rustenburg BWS – Tsitsing, Tantanana Scheme, Mosonthane–Maumong Scheme, Phokeng Scheme, Luka Scheme, Phatsima Scheme, Molote City Scheme, Vogelstruisfontein Scheme and Rustenburg Rural Scheme.***

- Groundwater

All the settlements rely on groundwater, either as only source of water, or in conjunction with Surface water. Groundwater is also used as

source to augment surface water supplies where the surface water doesn't reach all the settlements due to water pressure problems.

Table 29: Borehole Summary in RLM

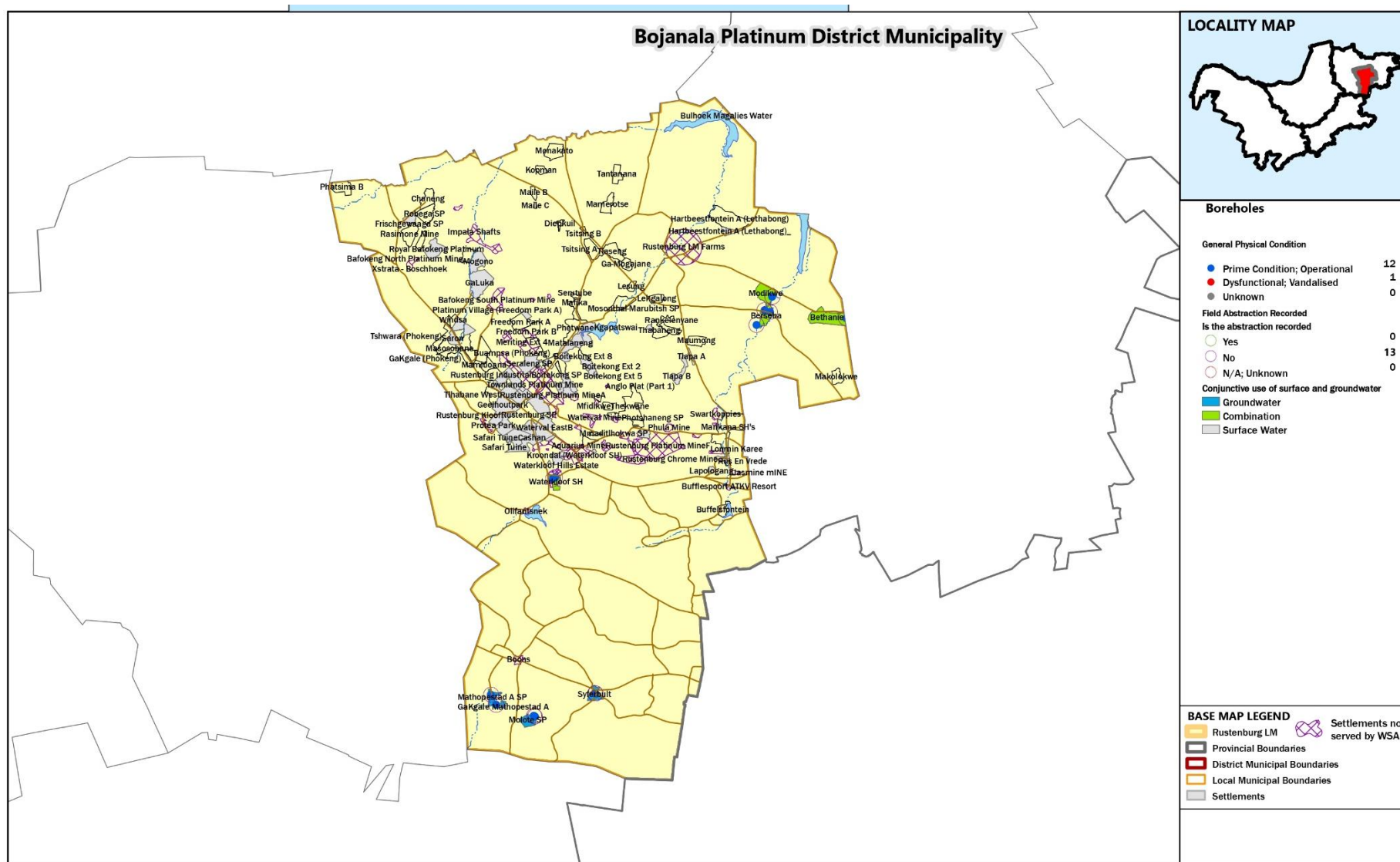
Borehole summary	
Total number of boreholes on the verified DWS database in conjunction with the WSA asset register	13
Boreholes in use	12
Boreholes unused	1
Boreholes dysfunctional	1

RLM 5 Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024

There are no vandalised boreholes and only 1 dysfunctional borehole in the WSA. The security measures at the boreholes seem to be adequate in protecting the boreholes.



Figure 36: RLM Groundwater Infrastructure



RLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024

DRAFT BPDM SPATIAL DEVELOPMENT FRAMEWORK



3.4.10.1.2 Moretele Local Municipality

- Water Scheme within MLM

According to the RLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, Moretele Local Municipality has the following water schemes serving the municipal area: *Temba Water Supply Scheme (located in the City of Tshwane LM), Transactile Wellfield water Scheme, Tloonane-Selepe water scheme, Fafung-Ruigtesloot water scheme, Dikgophaneng scheme, Jumbo*

- Groundwater

All the settlements rely on groundwater, either as the only source of water, or in conjunction with Surface water. Groundwater is also used as a source to augment surface water supplies where the surface water doesn't reach all the settlements due to water pressure problems.

There are at least 33 boreholes dysfunctional or vandalised within the MLM. Vandalism and theft pose a serious risk to the provision of a reliable service to all the settlements.

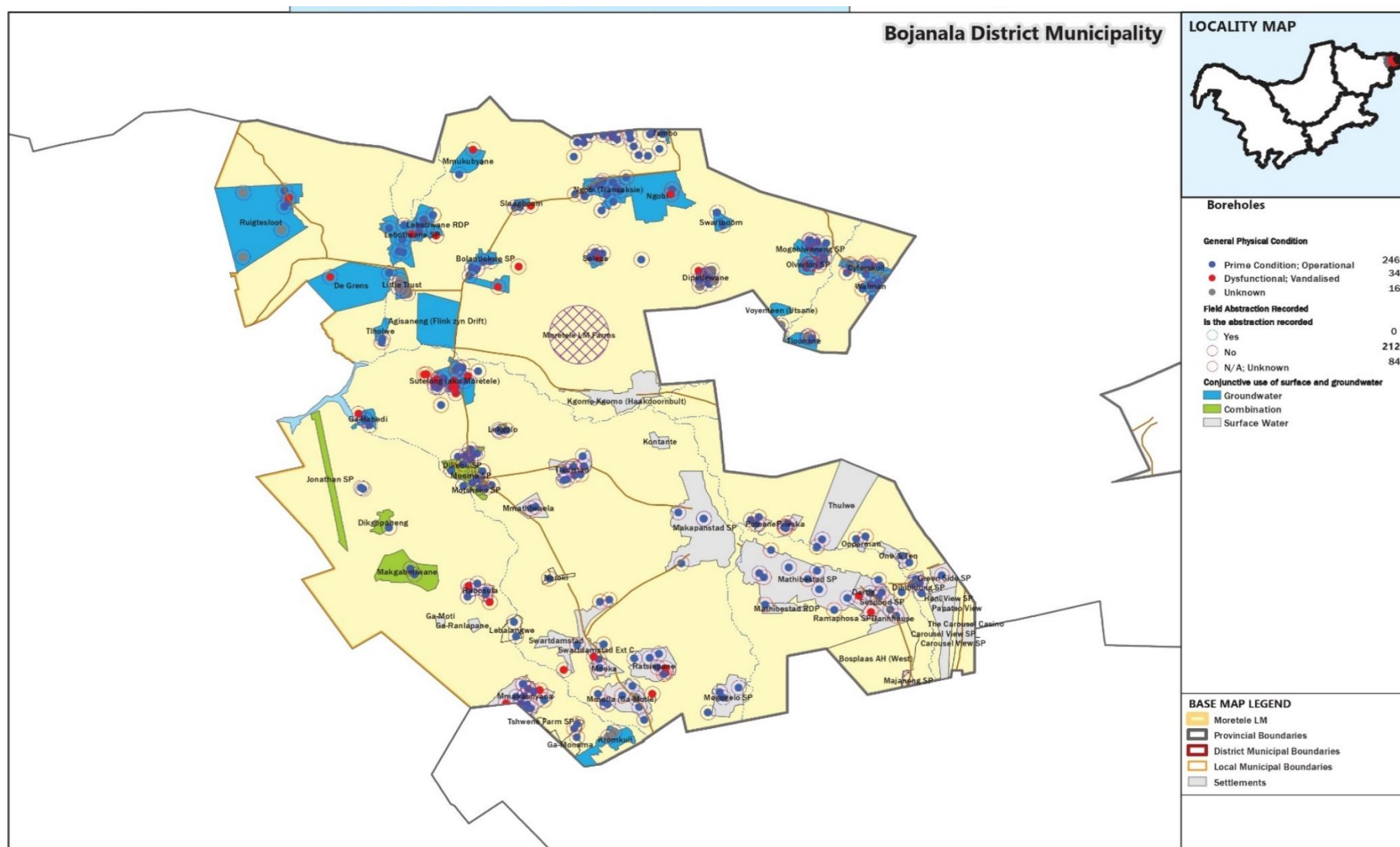
Table 30: Borehole Summary in MLM

Borehole summary	
Total number of boreholes on the verified DWS database in conjunction with the WSA asset register	296
Boreholes in use	262
Boreholes unused	34
Boreholes dysfunctional	34

MLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024



Figure 37: MLM Groundwater Infrastructure



MLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024



3.4.10.1.3 Kgetlengrivier Local Municipality

- Water Scheme within KRLM

According to the KRLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, Kgetlengrivier Local Municipality has the following water schemes serving the municipal area: **Koster Scheme, Mabaalstad Scheme, Derby/Rederile Scheme, Ratsegae Scheme, and Mazista Scheme.**

- Groundwater

Only Mazista, Ratsegae and Redirille-Derby rely on groundwater as the only source of water supply, while Koster and Mabaalstad (Swartruggens and Borolelo) rely on groundwater as emergency source or as an augmentation source.

Table 31: Borehole Summary in KRLM

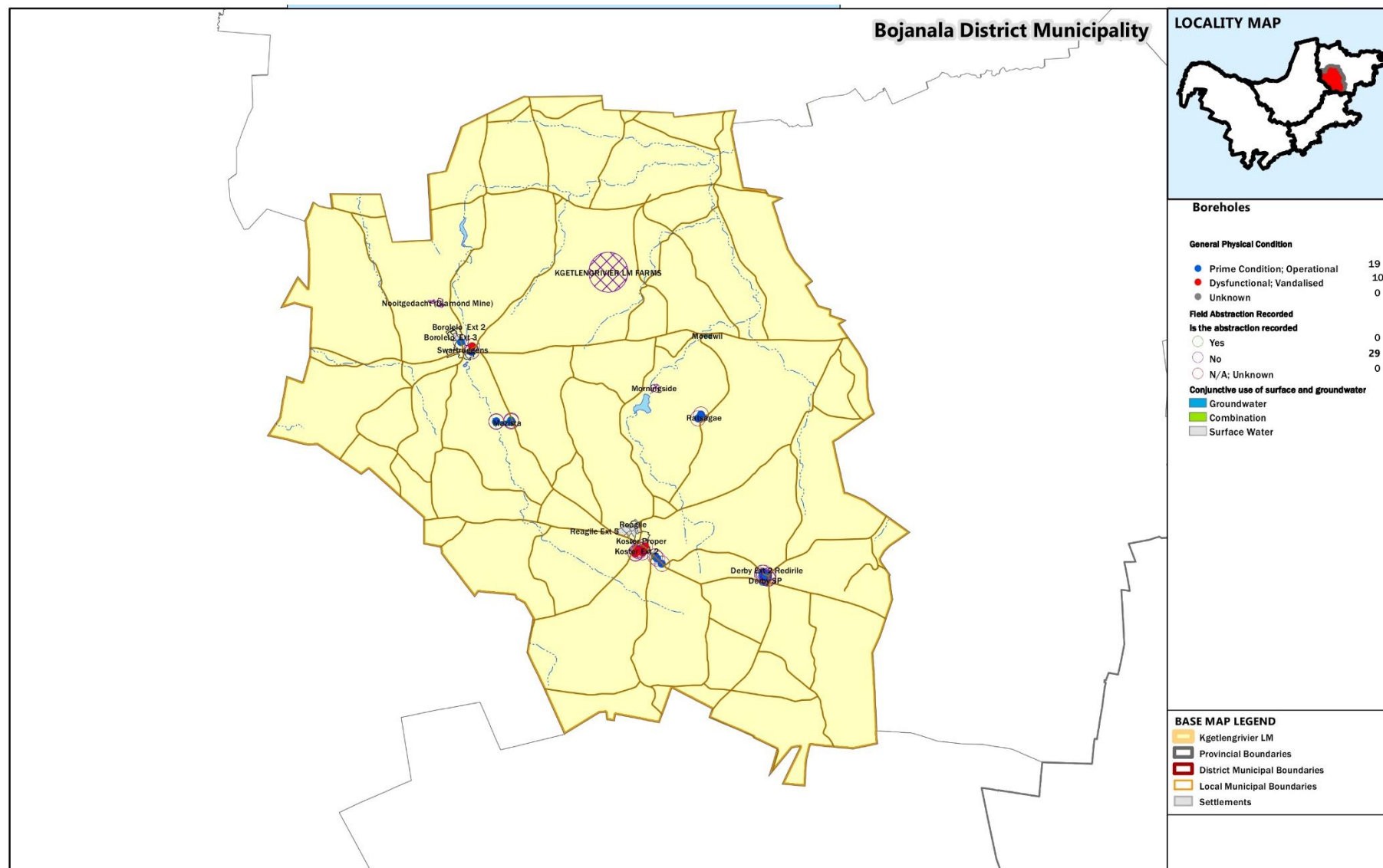
Borehole summary	
Total number of boreholes on the verified DWS database in conjunction with the WSA asset register	29
Boreholes in use	19
Boreholes unused	10
Boreholes dysfunctional	10

KRLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024

With the exception of the Derby Scheme boreholes, vandalism and theft pose a serious risk to the provision of a reliable service to the settlements of Mazista, Ratsegae, Morningsdale, and Moedwill. Furthermore, the boreholes supplying water to the Koster and Mabaalstad schemes must be refurbished and protected since these boreholes are the only backup in times of need.



Figure 38: KRLM Groundwater Infrastructure



KRLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024



3.4.10.1.4 Madibeng Local Municipality

According to the MDLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, Madibeng Local Municipality has the following water schemes serving the municipal area: Brits Water Supply Scheme, *Fafung-Ruigtesloot Water Scheme, Dikgophaneng scheme, Schoemansville Scheme, North East ODI 1 water scheme, Hartbeespoort South Supply Scheme, Pelindaba and Velindaba Scheme, West Water Scheme, Rustenburg BWS-Tlhabane*

- Groundwater

Table 32: Borehole Summary in MDLM

Borehole summary	
Total number of boreholes on the verified DWS database in conjunction with the WSA asset register	169
Boreholes in use	106
Boreholes unused	63
Boreholes dysfunctional	63

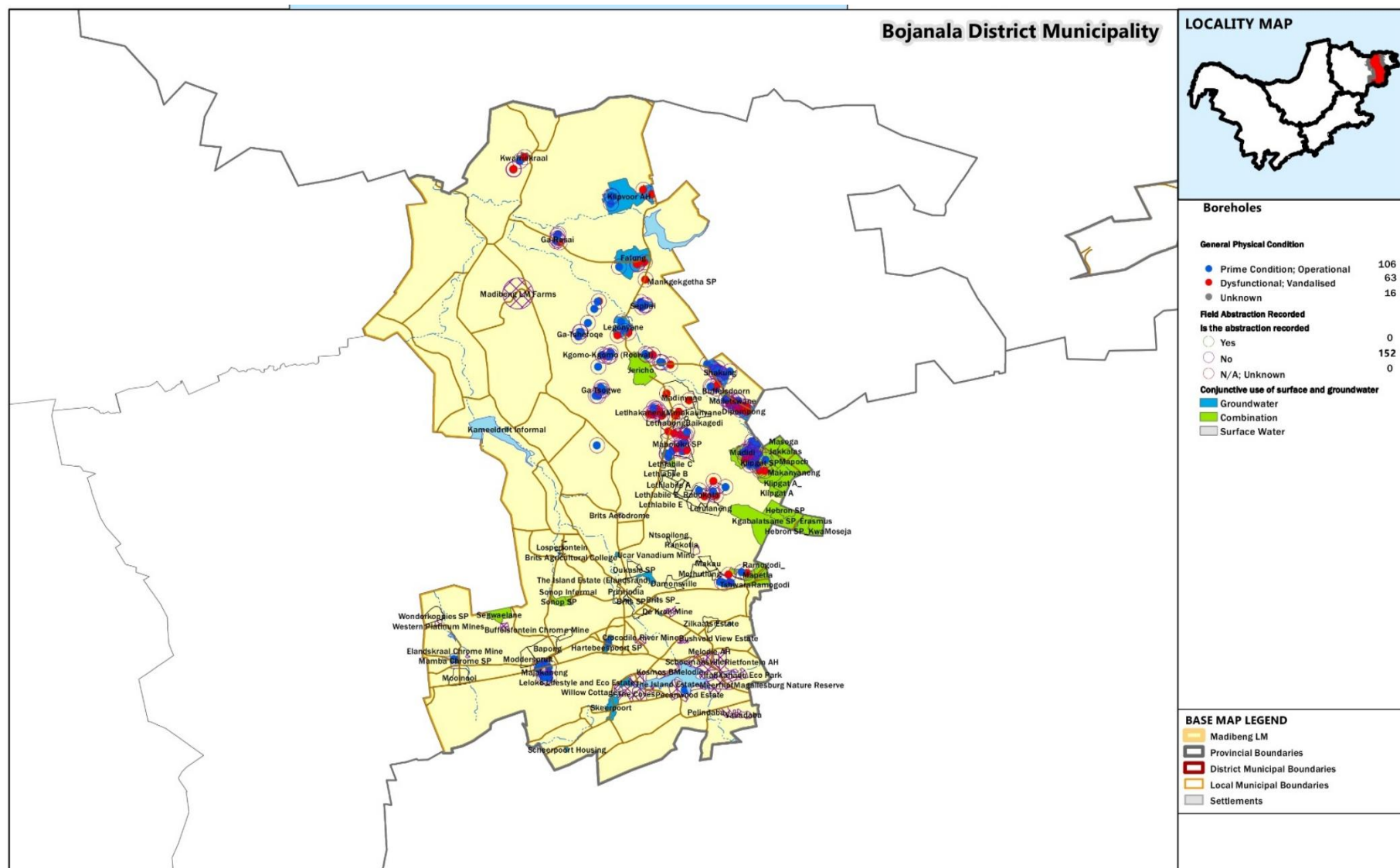
MDLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024

It has been noted that vandalism and theft also pose a serious problem within the WSA, especially within the rural areas and this has seemed to escalate over time. A program to update the security at boreholes,

together with refurbishment of the infrastructure, must be given priority for all borehole installations in the WSA area of jurisdiction.



Figure 39: MDLM Groundwater Infrastructure



MDLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024



3.4.10.1.5 Moses Kotane Local Municipality

According to the MKLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, Moses Kotaane Local Municipality has the following water schemes serving the municipal area: **Baphalane Scheme, Bapong-Bathalorwe Scheme, Disake/Morgalwaneng Water Scheme, Koffiekraal Water Scheme, Madikwe Water Scheme, Mmatau Water Scheme, Magong Water Scheme, Mankaipaya Water Scheme, Pitsedisulejang Water Scheme, Moletadi Water Scheme, Pella Water Scheme, Ngweding Water Scheme, Motlhabe Water Scheme, MLKM Vaalkop Bulk Water Supply Scheme.**

- Groundwater

All the settlements rely on groundwater, either as the only source of water, or in conjunction with Surface Water. Groundwater is also used as source to augment surface water supplies where the surface water does not reach all the settlements due to water pressure problems.

Table 33: Borehole Summary in MKLM

Borehole summary	
Total number of boreholes on the verified DWS database in conjunction with the WSA asset register	276
Boreholes in use	113
Boreholes unused	94

Boreholes dysfunctional

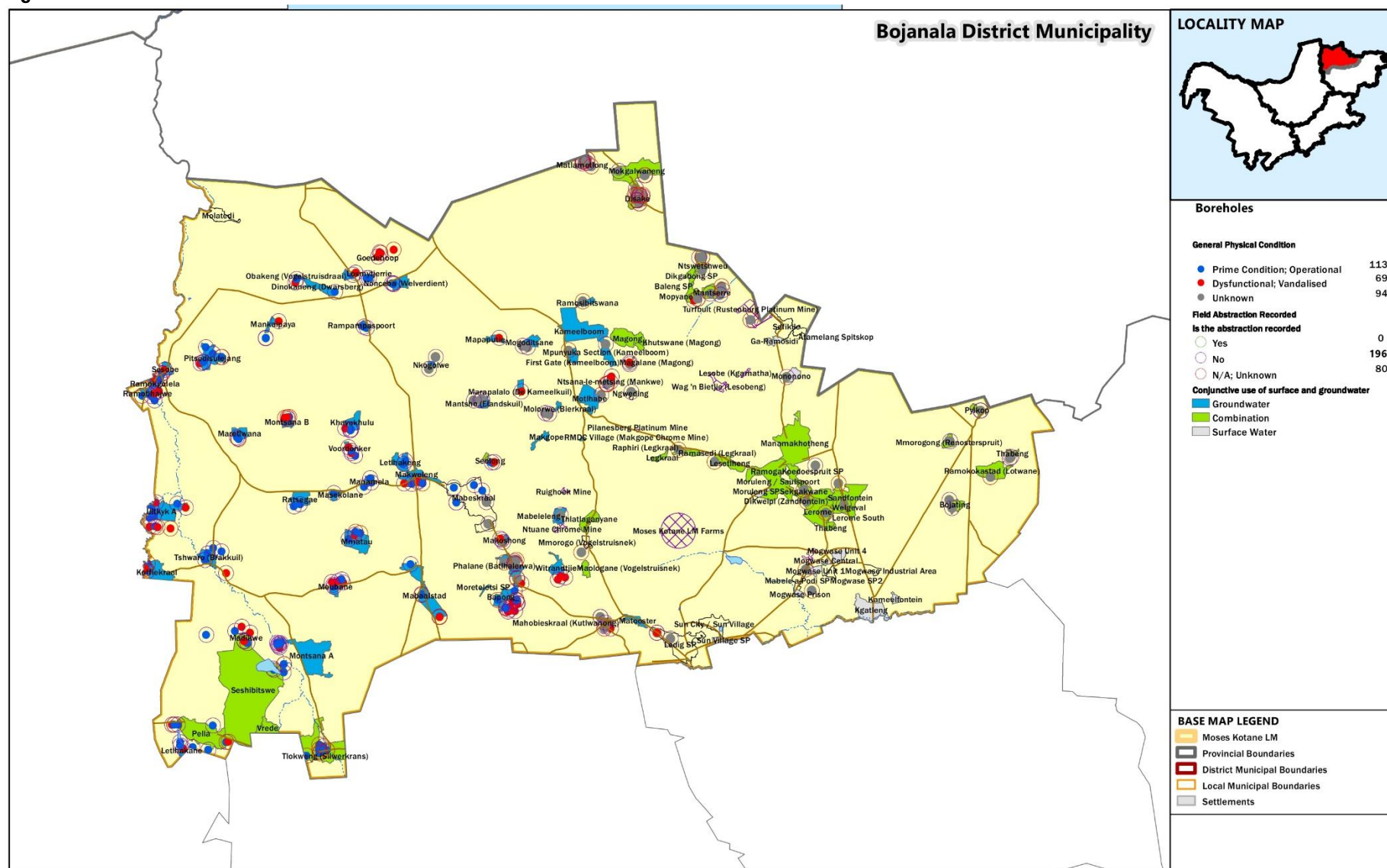
69

MKLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024

There are at least 69 boreholes which are dysfunctional or vandalized within the WSA.



Figure 40: MKLM Groundwater Infrastructure



MKLM 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan, 2024



3.4.10.1.6 Water supply systems challenges.

The Bojanala Platinum District Municipality faces several challenges in its water supply system. Firstly, aging infrastructure leads to frequent breakdowns and significant water losses, creating inefficiencies in service delivery. Pollution from industrial discharges and agricultural runoff has severely impacted the quality of raw water sources, particularly in the Crocodile and Hex River catchments, compromising public health. There are also notable disparities in water access, with 35% of households having piped water within their dwellings, while 30% depend on shared community taps, and another 35% lack access to piped water altogether, relying on alternative, less reliable sources. High water demand from the expanding mining and industrial sectors places additional strain on already limited water resources, exacerbating the challenges faced by the municipality in providing equitable and sustainable water services.

In response to the challenges faced in the water supply system, the Bojanala Platinum District Municipality is actively implementing several efforts to address these issues. Significant infrastructure upgrades are underway, including projects aimed at rehabilitating and expanding water treatment facilities, notably the Vaalkop and Olifantsnek Water Treatment Works, to enhance capacity and reliability. Alongside these improvements, water conservation initiatives are being

promoted through awareness campaigns that encourage residents to adopt water-saving measures, fostering a culture of sustainability. The municipality is engaging in public-private partnerships to collaboratively fund and manage critical water infrastructure, leveraging resources, expertise, and innovative approaches to ensure a more resilient and equitable water supply for all residents.

3.4.10.2 Sanitation

Sanitation and water are critical components of basic service that cannot be separated. Through its impact on health and the environment, it has considerable implications for economic development. To provide adequate sanitation service provision, it is imperative to have a stable and effective water supply system in place. Inefficient sanitation may pose a great risk to the community's health and is therefore critical in ensuring a conducive environment for living. The following sanitation systems are found within BPDM:

- Full Waterborne Sewer system
- Septic Tank/French Drain
- Pit Latrines

Rustenburg town, Sun City and towns such as Madikwe, Koster, Marikana, Kroondal, Brits, Hartebeespoort, Letlhabile and Mothutlung, are served by water-borne sewerage systems. Septic tank/ French drain systems are found in towns such as Swartruggens, Derby, Boons,



Boschoek, and Skeerpoort, and are generally maintained by the owners. Septic tank/ French drain systems are also found in isolated cases at schools and clinics in other areas. Almost all of the populated areas within the district, barring the above, make use of pit latrines that do not meet the required standards for BNG units. These inadequate facilities cause pollution and the contamination of groundwater. Severe health risks exist – especially at schools due to the overuse of pit latrines resulting in unhygienic conditions.

According to the 2022 Census, 54.1% of households in the BPDM have flush toilets connected to the sewerage system, making it the predominant sanitation method. Pit toilets follow at 41.9%, while chemical and bucket toilets account for a minimal 1.1% and 0.6%, respectively. Alarming, 1.5% of households lack toilet facilities altogether, with an additional 0.9% categorised as "other."

These statistics underscore the significant reliance on pit toilets and highlight the urgent need to address the sanitation backlog in the district. Aligning with the National Development Plan (NDP) 2030, this effort is essential to advancing the broader objectives of reducing poverty and inequality. This however, also shows some good progress towards ensuring access to formal sanitation within the municipality as a slightly larger number of households have access to flush toilets.

3.4.10.2.1 Land Fill sites

In accordance to the Bojanala Platinum District Municipality Environmental Management Framework (2018) report, the Bojanala District Municipality has 16 operational landfill sites (inclusive of both public and private).

- **Rustenburg Local Municipality**

The Rustenburg Local Municipality currently has 6 operational landfill sites. The only landfill site operated by the Local Municipality is the Waterval landfill site. The other 5 landfill sites are communal landfill sites, and these include the Marikana, Lethabong, Monnakato, Phatsima communal and Bethanie communal sites. The Townlands landfill site, previously in operation, has now been closed.

- **Moses Kotane Local Municipality**

The Moses Kotane Local Municipality has a total of 4 Landfill sites within the municipal jurisdiction. 2 of these landfill sites are municipal landfill sites and they include, Madikwe and Mogwase landfill sites. The other 2 the landfill sites are privately owned, one being owned by the by Sun City and one by Swartklip Platinum Mine.



- **Madibeng Local Municipality**

Within the Madibeng Local Municipality, there is a total of 4 landfill sites, with only 1 landfill site that is operated by the municipality, namely the Hartbeespoort Regional landfill site. And the other 3 landfill sites are privately operated namely Eastern Platinum, Western Platinum and the Mooiooi landfill sites.

- **Kgetlengrivier Local Municipality**

In the Kgetlengrivier Local Municipality, there are two unlicensed municipal landfill sites located in Koster and Swartruggens areas.

- **Moretele Local Municipality**

There is no municipal licensed waste disposal site in the Moretele Local Municipality but solid waste is disposed of at an unlicensed, private waste disposal site in Bosplaas.

3.4.10.2.2 Waste Water Treatment Works (WWTWs)

BPDM currently has 14 Waste Water Treatment Works (WWTWs) that are primarily owned and operated by the local municipalities and treat wastewater. These are as follows:

- Rustenburg Local Municipality has four Waste Water Treatment Works situated in Rustenburg, Boitekong, Monnakato and Lethabong.

- Kgetlengrivier Local Municipality has three Waste Water Treatment Works situated in Koster, Mazista and Swartruggens.
- Madibeng Local Municipality has four Waste Water Treatment Works located in Brits, Mothutlung, Letlhabile and Rietfontein areas.
- There is two Waste Water Treatment Works in the Moses Kotane Local Municipality situated at Madikwe and Mogwase area.
- The Moretele Local Municipality has one Waste Water Treatment Works situated in Swartdam, owned by the local municipality.

A few challenges have been identified in the 5-Year Water and Sanitation Reliability Service Delivery Implementation Plan with regards to the Waste Water Treatment Works within the Bojanala Platinum District Municipality, and they include the following:

- Insufficient capacity of WWTWs in the district to handle the current rate of population growth,
- Inadequate human capacity and maintenance levels of WWTWs in the district,
- Key mechanical components such as pumps are beyond their expected lifespan
- Non-compliance of WWTWs and their potential impact on surface and groundwater resources.



3.4.10.3 Electricity

Electricity is a critical component for production processes and household activities, as outlined in the Integrated Energy Plan (2013). A lack or shortage of energy has significant impacts on economic growth and the quality of life of citizens.

The BPDM is serviced by three Eskom delivery areas, namely Eskom, Bloemfontein (part of Moses Kotane and Kgetlengrivier), Eskom North-East (in the eastern Madibeng and Moretele areas), and Eskom North (the rest of BPDM). Electricity for house and business connections is extracted from local substations and in some villages a prepaid metering system has been installed to ensure good credit control. However, some towns have been able to acquire licenses to provide electricity within their areas of jurisdiction with Eskom only providing bulk infrastructure.

Although Eskom power lines cover some parts of the BPDM, there are still other parts where such infrastructure is absent, especially in the Moretele local municipality and the rural areas of the Madibeng, Moses Kotane and Kgetlengrivier local municipalities. It is important to note that the existing and new 400 KV lines primarily transfers electricity over large distances, but also supplies electricity to major substations.

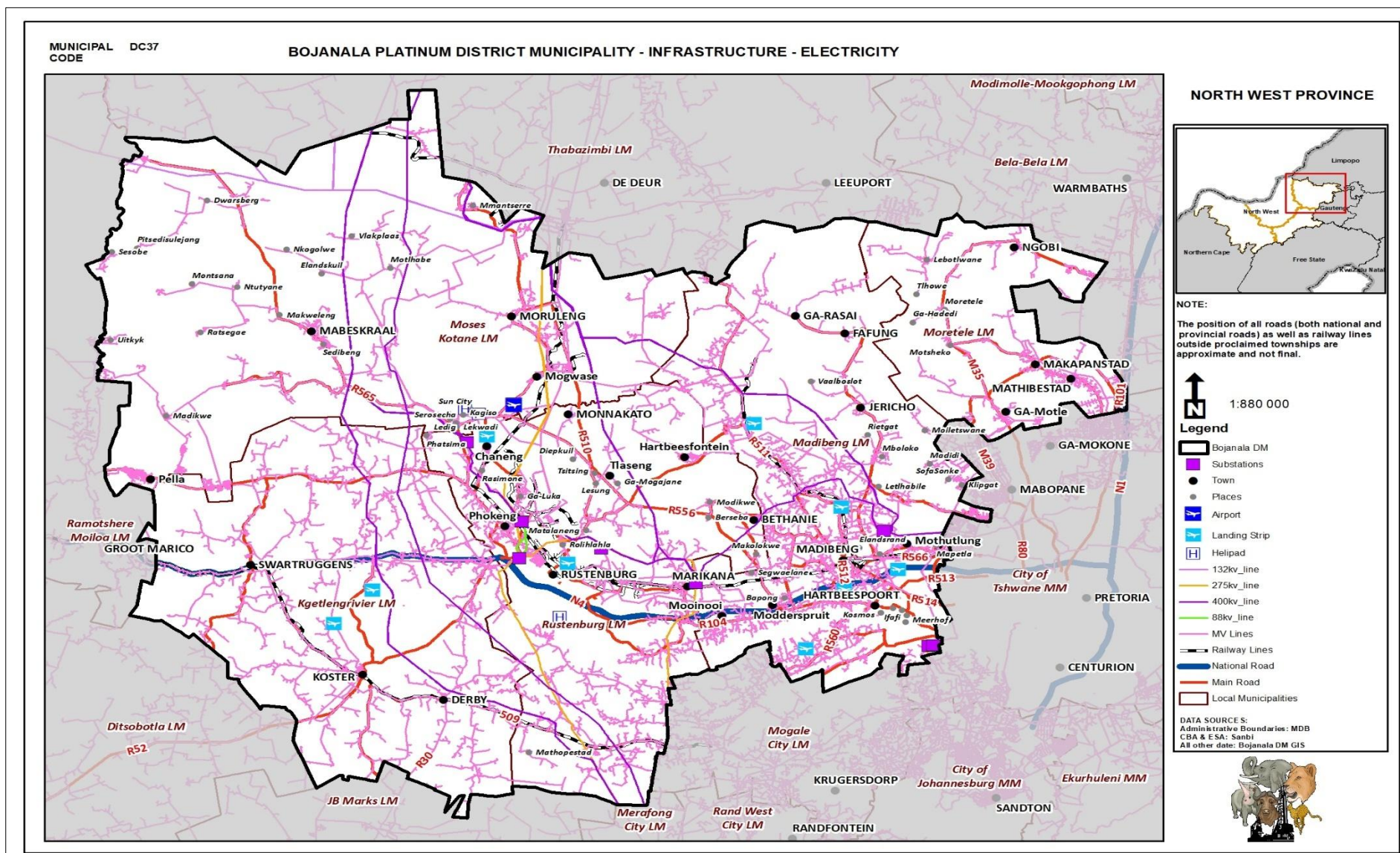
Within the BPDM, electricity is essential for household uses such as cooking, heating, and lighting. However, the BPDM is not authorised to perform the electricity function but its municipalities, with the exclusion of MKLM and MLM, the other three (RLM, KLM, MDLM) they do have a license to supply certain areas, especially their towns and major urban areas.

Instead, the role of BPDM is to identify needs, address backlogs, and plan for electrification within its jurisdiction, while coordinating with Eskom, the main service provider.

This progress and growth as evident and underlined by the Statistics South Africa Census 2011 and 2022, including ongoing efforts from the municipality to provide such services. It further highlights ongoing efforts to expand electrification across the district. Despite not having direct authority over electricity provision, the municipality collaborates with Eskom to implement electrification projects. The BPDM IDP Review 2023/2024 identifies specific areas for electrification projects, focusing on addressing backlogs in rural and peri-urban communities, ensuring equitable access to energy for all residents.



Map 35: Electricity network within the BPDM





3.4.10.4 Renewable Energy

The Integrated Resource Plan (IRP) 2023, posits that Solar Pv, wind and Concentrated Solar Power (CPV) with storage presents an opportunity to diversify the electricity mix to produce distributed generation and provide off-grid electricity. There is a need to diversify the electricity generation to ensure security of supply and reduction in the carbon footprint created by the current heavy reliance of South Africa on coal to produce electricity. The electricity demand is increasing in SA, and in order to match that demand there is a need to supply a diversified power generation that includes renewable energy technologies. These technologies include solar, wind, small utility scale hydro, biomass, biogas and energy storage that the Department of Mineral Resources and Energy (DMRE) intends to develop and implement as identified in the approved IRP 2023.

3.4.10.4.1 Existing Renewable Energy Projects.

The BPDM currently has Renewable projects which are currently existing and operational, notably these includes the following.

RustMo1 Solar Farm

The RustMo1 Solar Farm is regarded as the first renewable energy project in the North West region and marked a significant milestone as the first Independent Power Producer (IPP) under the Renewable Energy Independent Power Producers Procurement Programme

(REIPPPP) to reach financial closing in 2012 and commence commercial operations in 2013. The Solar Farm is a 7 MW solar photovoltaic (PV) power generation facility located in the Rustenburg area about 22 Kilometres from the city centre. RustMo1 supplies electricity to the Eskom grid and has a 20-year power purchase agreement (PPA), generating approximately 12.5 million kWh of clean energy annually, sufficient to power over 2,000 average South African homes. The project has contributed significantly to local socio-economic development, creating jobs and supporting community initiatives through the Momentous Foundation Community Trust.

Figure 41: RustMo1 Solar Farm



Source: Adopted from Google Earth Pro, 2025

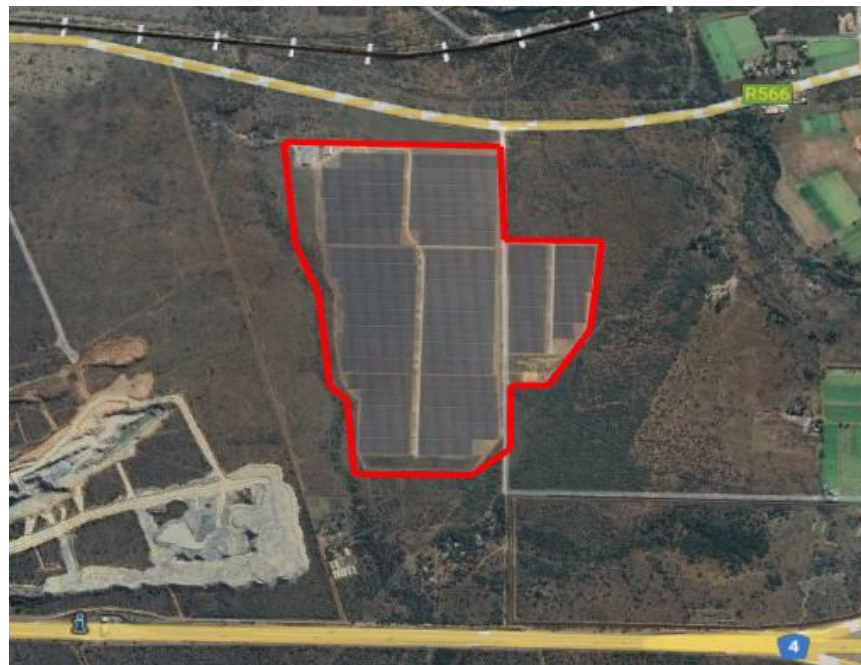


De Wildt Solar Park

The De Wildt Solar Park is a notable renewable energy project located in the Madibeng Local Municipality, within the BPDM. It is situated near Brits town (in Portions of the Farm Schietfontein 437 JQ) and covers an area of 185 hectares. This solar park was commissioned in January 2021, following construction that began in March 2019.

The project has an operational capacity of 50 MW and it utilizes photovoltaic (PV) technology, with some phases employing single-axis tracker systems to optimize energy production. The solar park generates approximately 1 23,186 MWh of electricity annually, which is sufficient to power around 18,200 to 33,000 South African households. As part of the South African Government's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), this project aligns with national goals to increase renewable energy capacity and reduce reliance on fossil fuels.

Figure 42: De Wildt Solar Park



Source: Adopted from Google Earth Pro, 2025

3.4.10.4.2 Proposed Renewable Energy Projects.

There are also a number of Renewable projects that have been proposed within the BPDM. The following is the renewable projects proposed within the BPDM as according to the 'South African Renewable Energy EIA Application Database' with data being reflected as current as of 20 February 2025 broken down local municipalities of the BPDM



KGETLENGRIVIER LOCAL MUNICIPALITY

Table 34: Proposed Renewable Energy Projects within the KRLM

PROJECT TITTLE	APPLICATION RECIEVED	NAME OF APPLICANT	LOCAL MUNICIPALITY	TECHNOLOGY	MEGAWATTT	PROJECT STATUS	DECISION DATE
The Proposed 65 MW Rhino Solar Photovoltaic Project north west of Rustenburg, North West Province.	2023/03/01	Rhino Solar PV (Pty) Ltd	Kgetlengrivier Local Municipality	Solar PV	65	Approved	9/14/2023
Proposed Establishment of A 50 Mw Photovoltaic Solar Farm On Portion 44 Of Farm Kortfontein No.461 Within Kgetlengrivier Local Municipality, North West Province	2012/09/12	Lotsha Energy (Pty) Ltd	Kgetlengrivier Local Municipality	Solar PV	50	Approved	12/19/2019
The proposed Boshhoek Solar 1 PV Facility and associated infrastructure, including a Grid Connection located in the Kgetlengrivier and Rustenburg Local Municipality within the Bojanala District Municipality, North West Province.	2024/02/27	BOSHOEK SOLAR 1 (PTY) LTD	Kgetlengrivier Local Municipality	Solar PV	20	Approved	10/23/2024
The proposed Boshhoek Solar 2 PV Facility and associated infrastructure, including a Grid Connection located in the Kgetlengrivier and Rustenburg Local Municipality within the Bojanala District Municipality, North West	2024/02/27	BOSHOEK SOLAR 2 (PTY) LTD	Kgetlengrivier Local Municipality	Solar PV	20	Approved	10/24/2024
The proposed Boshhoek Solar 3 PV Facility and associated infrastructure, including a Grid Connection located in the Kgetlengrivier Local Municipality within the Bojanala District Municipality, North West Province.	2024/02/27	BOSHOEK SOLAR 3 (PTY) LTD	Kgetlengrivier Local Municipality	Solar PV	20	Approved	10/22/2024

Source: Renewable Energy EIA Application Database, 2025.



MADIBENG LOCAL MUNICIPALITY

Table 35: Proposed Renewable Energy Projects within the MDLM

PROJECT TITTLE	APPLICATION RECIEVED	NAME OF APPLICANT	LOCAL MUNICIPALITY	TECHNOLOGY	MEGAWATTT	PROJECT STATUS	DECISION DATE
The proposed development of a 88kv switching station and 2 single circuit 88 kv transmission lines from the proposed 50 mw solar pv park on portion 15 of the farm schietfontein 437 jq within Madibeng local municipality, North West Province	2017/11/03	Zolograph Investments (RF) Proprietary Limited	Madibeng Local Municipality	Wind	0	Approved	12/19/2019
The proposed 5MW solar power station to be established on a 8.7 ha land of the farm Krelingspost 425 JQ near Dewildt agricultural holdings, within Madibeng Local Municipality	2011/02/02	Zolograph Investments (RF) (Pty) Ltd	Madibeng Local Municipality	Solar PV	5	Approved	12/19/2019
Proposed Construction Of A 50MW Solar Power Plant To Be Established On 166,312 Hectare Land On The Farm Shietfontein 437jq, Madibeng Local Municipality, North West Province	2011/07/22	Zolograph Investments (RF) (Pty) Ltd	Madibeng Local Municipality	Solar PV	50	In process	12/19/2019
Proposed Construction Of A 50MW Solar Power Plant To Be Established On 166,312 Hectare Land On The Farm Shietfontein 437jq, Madibeng Local Municipality, North West Province	2011/07/22	Zolograph Investments (RF) (Pty) Ltd	Madibeng Local Municipality	Solar PV	0	Approved	12/19/2019
Proposed expansion of the co-generation plant, including oil tanks on various portions of the farm buffelsfontein 465 JQ, Madibeng Local Municipality, North West Province	2011/11/01	To Review	Madibeng Local Municipality	Petroleum	17	Approved	12/19/2019
Proposed Avelar Solar Panel Project for International Ferro Metals (Pty) Ltd	2014/10/16	Avelar Energy	Madibeng Local Municipality	Solar PV	11.16	Approved	12/19/2019



Proposed Kgabalatsane PV2 solar facility near Brits, Madibeng Local Municipality, North West Province	2013/10/03	Built Environment Africa Energy Services (Pty) Ltd	Madibeng Local Municipality	Solar PV	10	Approved	12/19/2019
Proposed Kgabalatsane Solar PV 1 facility near Brits, Madibeng Local Municipality, North West Province	2013/10/03	Built Environment Africa Energy Services (Pty) Ltd	Madibeng Local Municipality	Solar PV	10	Approved	12/19/2019
Proposed 1MW PV plant at Lonmin Western Platinum Limited within Madibeng Local Municipality in North West Province	2013/08/01	Lonmin Plc: Western Platinum Limited	Madibeng Local Municipality	Solar PV	1	Approved	12/19/2019
Proposed Kgabalatsane solar energy facility (30MW) situated on the farm syferfontein 430 near Brits within Kgabalatsane Local Municipality, North West Province	2016/08/15	Built Africa Energy Services (Pty) Ltd	Madibeng Local Municipality	Solar PV	0	Approved	12/19/2019
50MW solar park to be established on Portion 15, 26 and 27 of the Farm Schietfontein 437 JQ within the Madibeng Local Municipality in the North West Province	2015/11/18	Zolograph Investments (RF) (Pty) Ltd	Madibeng Local Municipality	Solar PV	75	Approved	12/19/2019
50MW solar park to be established on Portion 15, 26 and 27 of the Farm Schietfontein 437 JQ within the Madibeng Local Municipality in the North West Province	2018/11/02	Zolograph Investments (RF) (Pty) Ltd	Madibeng Local Municipality	Solar PV	0	Approved	12/19/2019

Source: Renewable Energy EIA Application Database, 2025

MORETELE LOCAL MUNICIPALITY

Table 36: Proposed Renewable Energy Projects within the MLM

PROJECT TITLE	APPLICATION RECEIVED	NAME OF APPLICANT	LOCAL MUNICIPALITY	TECHNOLOGY	MEGAWATT	PROJECT STATUS	DECISION DATE
Proposed construction of the 100MW Moretele Solar Power Plant within the Moretele Local Municipality	2012/10/18	Moretele Local Municipality	Moretele Local Municipality	Solar PV	100	Approved	12/19/2019
Proposed construction of the 100MW Moretele Solar Power Plant within the Moretele Local Municipality	2016/02/16	Moretele Local Municipality	Moretele Local Municipality	Solar PV	0	Approved	12/19/2019
Proposed construction of the 100MW Moretele Solar Power Plant within the Moretele Local Municipality	2016/05/12	Moretele Local Municipality	Moretele Local Municipality	Solar PV	0	Approved	12/19/2019

Source: Renewable Energy EIA Application Database, 2025



MOSES KOTANE LOCAL MUNICIPALITY

Table 37: Proposed Renewable Energy Projects within the MKM

PROJECT TITTLE	APPLICATION RECIEVED	NAME OF APPLICANT	LOCAL MUNICIPALITY	TECHNOLOGY	MEGAWATTT	PROJECT STATUS	DECISION DATE
Proposed GI Renewable IPP, MatauPV, Moses Kotane Local Municipality, North West Province	2012/03/07	To Review	Moses Kotane Local Municipality	Solar PV	15	In process	12/19/2019

Source: Renewable Energy EIA Application Database, 2025.

RUSTENBURG LOCAL MUNICIPALITY

Table 38: Proposed Renewable Energy Projects within the RLM

PROJECT TITTLE	APPLICATION RECIEVED	NAME OF APPLICANT	LOCAL MUNICIPALITY	TECHNOLOGY	MEGAWATTT	PROJECT STATUS	DECISION DATE
Proposed development of the Nala Solar Park and associated infrastructure in Marikana within the jurisdiction of Rustenburg Local Municipality in the North West Province.	2021/11/16	Nala Solar Park	Rustenburg Local Municipality	Solar PV	0	Approved	12/19/2019
Construction Of The Rustno1 7MW Pv Plant On Portion 108, A Portion Of Portion 23 Of The Farm Spruitfontein In The Rustenburg Local Municipality, North West Province	2012/09/21	RustMo1 Solar Farm Pty Ltd	Rustenburg Local Municipality	Solar PV	200	Approved	12/19/2019
The Proposed Construction Of The Rustmo2 Pv Plant On A Site Near Buffelspoort, Rustenburg Local Municipality, North West Province	2012/01/31	RustMo2 Solar Farm Pty Ltd	Rustenburg Local Municipality	Solar PV	10	Approved	12/19/2019
The Proposed Construction Of The Rustmo2 Pv Plant On A Site Near Buffelspoort, Rustenburg Local Municipality, North West Province	2014/07/07	RustMo2 Solar Farm Pty Ltd	Rustenburg Local Municipality	Solar PV	0	Approved	12/19/2019
The Proposed Construction Of The Rustmo2 Pv Plant On A Site Near Buffelspoort, Rustenburg Local Municipality, North West Province	2016/05/10	RustMo2 Solar Farm Pty Ltd	Rustenburg Local Municipality	Solar PV	0	Approved	12/19/2019
Proposed RUSTMO3 PV plant, North West Province	2012/07/04	To Review	Rustenburg Local Municipality	Solar PV	5	Approved	12/19/2019

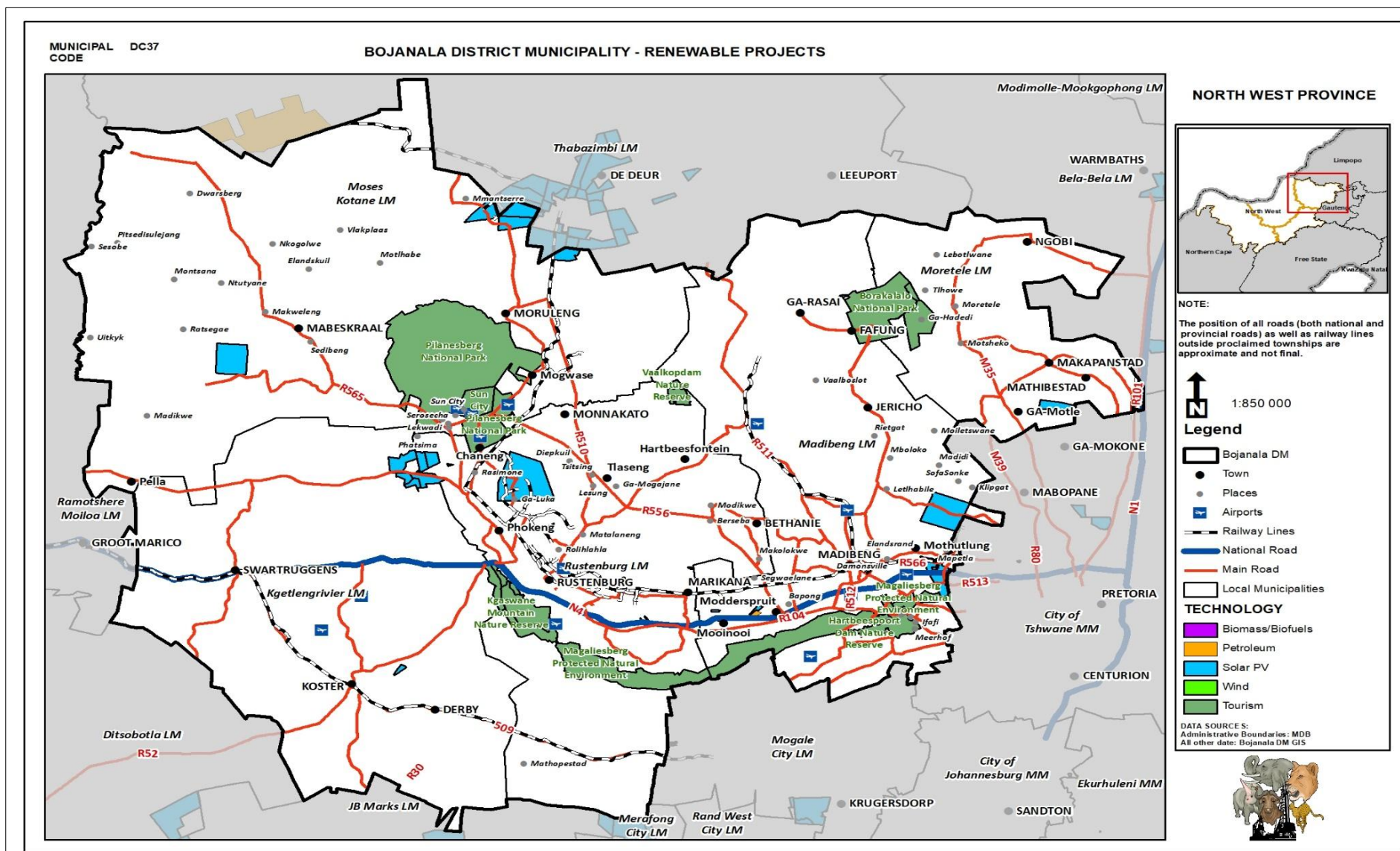


Proposed RUSTMO4 PV plant, North West Province	2012/01/11	To Review	Rustenburg Local Municipality	Solar PV	5	In process	12/19/2019
The Proposed 240 MW Onderstepoort Solar 1 Photovoltaic Project north west of Rustenburg, North West Province.	2023/03/01	Onderstepoort Solar 1 (Pty) Ltd	Rustenburg Local Municipality	Solar PV	240	Approved	9/26/2023
The Proposed 240 MW Onderstepoort Solar 2 Photovoltaic Project north west of Rustenburg, North West Province.	2023/03/01	Onderstepoort Solar 2 (Pty) Ltd	Rustenburg Local Municipality	Solar PV	240	Approved	9/26/2023
The proposed Impala Rustenburg Solar PV Facility within the Rustenburg Local Municipality and Bojanala District Municipality in the North West Province	2023/10/18	Impala Platinum Ltd - Rustenburg	Rustenburg Local Municipality	Solar PV	140	Approved	6/19/2024

Source: Renewable Energy EIA Application Database, 2025.



Map 36: Proposed Renewable Projects within the BPD.





3.4.10.5 ICT Infrastructure

The nine-point plan which was announced in the 2015, placed a focus on critical areas such as technology, energy, tourism, agriculture, boosting SMMES, science and, industrialization and transport. Amongst the nine components of this plan includes the “State reform and boosting the role of state-owned companies, science, technology and innovation, information and communications technology infrastructure or broadband roll-out, water, sanitation and transport infrastructure”. And could play a role in solving various challenges faced by the municipality in implementing reliable ICT and telecommunication networks all around the jurisdiction.

3.4.10.5.1 Challenges on the effective provision of ICT infrastructure.

The predominant rural parts of the BPDM presents challenges for ICT infrastructure development, including telecommunication towers. The ICT sector holds potential to drive integrated rural development. However, the implementation of ICT policies in general rural South Africa, including regions within BPDM, faces challenges such as inadequate infrastructure, lack of skilled personnel, and insufficient funding. Telecommunication service providers also often prioritize urban and high-density areas, leading to lack of provision in the rural

communities as network providers may not find it financially viable to invest in such areas.

The BPDM does not have an ICT master plan that integrate telecommunications, internet access, and digital transformation efforts. This therefore results in fragmented and uncoordinated efforts to improve connectivity within the BPDM. Due to limited financial resources, ICT projects often receive less priority compared to critical infrastructure such as water, roads, and housing. This leads to slow progress in improving telecommunications and digital services.

3.4.10.5.2 Improving ICT infrastructure

To improve the availability and quality of ICT infrastructure the following could be considered in the BPDM

- Invest in ICT Infrastructure.

Prioritize the development of robust ICT infrastructure to support economic growth and service delivery.
- Capacity Building Initiatives.

Implement training programs to enhance the skills of ICT personnel and ensure effective project management.
- Strengthen Governance



Implement stricter procurement processes and ensure transparency to prevent fraud and mismanagement in ICT projects.

3.4.11 Priorities Per Municipality Within BPDM

Table 39: Priorities per municipality

MUNICIPALITY	PRIORITIES				
	1	2	3	4	5
Kgetlengrivier LM	Water & Sanitation	Electrification	Spatial Planning	Local Economic Development	Solid Waste Management & Cemetery
Madibeng LM	Roads & Stormwater	Water & Sanitation	Land & Housing	Electricity	Social Services
Moretele LM	Water	Housing	Internal Roads	Stormwater & Drainage	High Mast Lights
Moses Kotane LM	Water & Sanitation	Roads & Stormwater	Sports & Recreation	Dept Collection	Institutional Development
Rustenburg LM	Water & Sanitation	Roads & Stormwater	Electricity	Land & Housing	Sustainable Rural development

Source: BPDM IDP 2022/2027

The Bojanala Platinum District Municipality IDP 2022/2027, has identified and listed priority projects per the various municipalities within the district. The Water and Sanitation is the most prominent as an important priority amongst the municipalities. The priorities also include, Roads & stormwater, Housing, Electrification, Internal roads, Spatial planning, Land and Housing, Sports and recreation, Local Economic Development, Debt collection, Solid Waste Management & Cemetery, High Mast Lights, Institutional Development and Sustainable

Rural Development. The prominence of water and sanitation underscores the municipalities' commitment to providing essential services that support public health and dignity. Together, all these priorities signify a balanced and inclusive development agenda aimed at improving the quality of life for all residents.

3.4.12. Tourism and Heritage

3.4.12.1 Tourism and Natural Attractions

According to the BPDM IDP 2022/2027, Tourism plays a vital role in the development of commercial organizations and the operation of holidays as a tool to improve the economy. Particularly tourism could make a substantial contribution to the well-being and prosperity of residents. Bojanala Platinum District Municipality Platinum District has many tourist attraction destinations like:

- Sun City/Lost City Complex in Moses Kotane Municipality which is a luxury resort and casino complex providing entertainment and leisure activities.
- Pilanesberg Game Park in Rustenburg Local Municipality which is a renowned game reserve offering diverse wildlife and safari experiences.
- Hartbeespoort dam in Madibeng Local Municipality, A popular destination for water sports and recreational activities.



- Magaliesberg Complex, Offers hiking, rock climbing, and scenic beauty.
- Borakalalo National Park in Madibeng Local Municipality,
- Vaalkop Dam Nature Reserve in Madibeng Local Municipality,
- Kgaswane Mountain Reserve in RLM. These resorts host many recreational activities such as golf, gambling, and water-based entertainment.

These attractions draw visitors both domestically and internationally, bolstering the local tourism industry. BPDm shares natural resources and tourism sites with neighbouring municipalities, presenting opportunities for collaborative management and development to enhance economic benefits and ensure sustainable utilization of these assets.

3.4.12.2 Heritage Sites

The heritage resources of the BPDm include both tangible resources (e.g. heritage objects, natural features and landscapes) and intangible resources such as oral histories, traditional knowledge systems, cultural practises and folklore. The rapid development of mining and other activities in the BPDm has contributed towards an increased heritage resource knowledge base in the area.

Humankind has been an inhabitant of the Magaliesberg policies and management practices and surrounding areas for millions of years and

(resource) to ensure that the significant archaeological sites in the vicinity reveal ample retained. The Cradle of Humankind spanning the border between the North-west and Gauteng provinces contains fossils and skeletal remains, amongst other archaeological finds, that are amongst the oldest records of human remains.

Gondolin and Haasgat fall within the band of important paleo-anthropological sites that comprise the Sterkfontein Valley landscape, within the Cradle of Humankind.

Kruger Cave close to the Olifantsnek Dam is the most important Late Stone Age locality in the province. Excavations found that hunter-gatherers occupied the site over many years, leaving behind a rich suite of cultural materials, apart from an extensive lithic assemblage. The remains of iron smelting furnaces and ceramics in Kruger Cave are evidence of the subsequent utilisation of this locality by African farmers.

Most of the Magaliesberg sites engravings occur near numerous stone-walled settlements. The engravings show authorship of both hunter-gatherers and African farmers, e.g. at the large stone-walled settlement of Olifantspoort at Maanhaarrant in the BPDm. Later Iron Age sites occur across the entire NorthWest province, including the BPDm. Important documented sites associated with this time are:



- Broederstroom, a Provincial Heritage Site near the Hartbeespoort Dam,
- Molokwane, a potential national heritage site west of Rustenburg that was the pre-difaqane 19th-century capital of the Modimosana Mmatau Kwenq,
- The stone-walled Tlokwa settlement of Marothodi near Pilanesberg that was the capital of the Rustenburg Tlokwa prior to their dispersal during the difaqane,
- The Olifantspoort complex near Koster that contain extensive stonewalled settlements.
- The mid-19th century settlement of Mabele-a-Podi in the Pilanesberg National Park that was the capital of Pilane's Kgafela Kaatla,
- Settlements along the Kgetleng (Elands) River that yielded insight into the smelting and working of copper and iron by indigenous metal workers, and
- A number of other aggregated stone-walled settlements across the BPDM landscape that had been identified during aerial surveys.

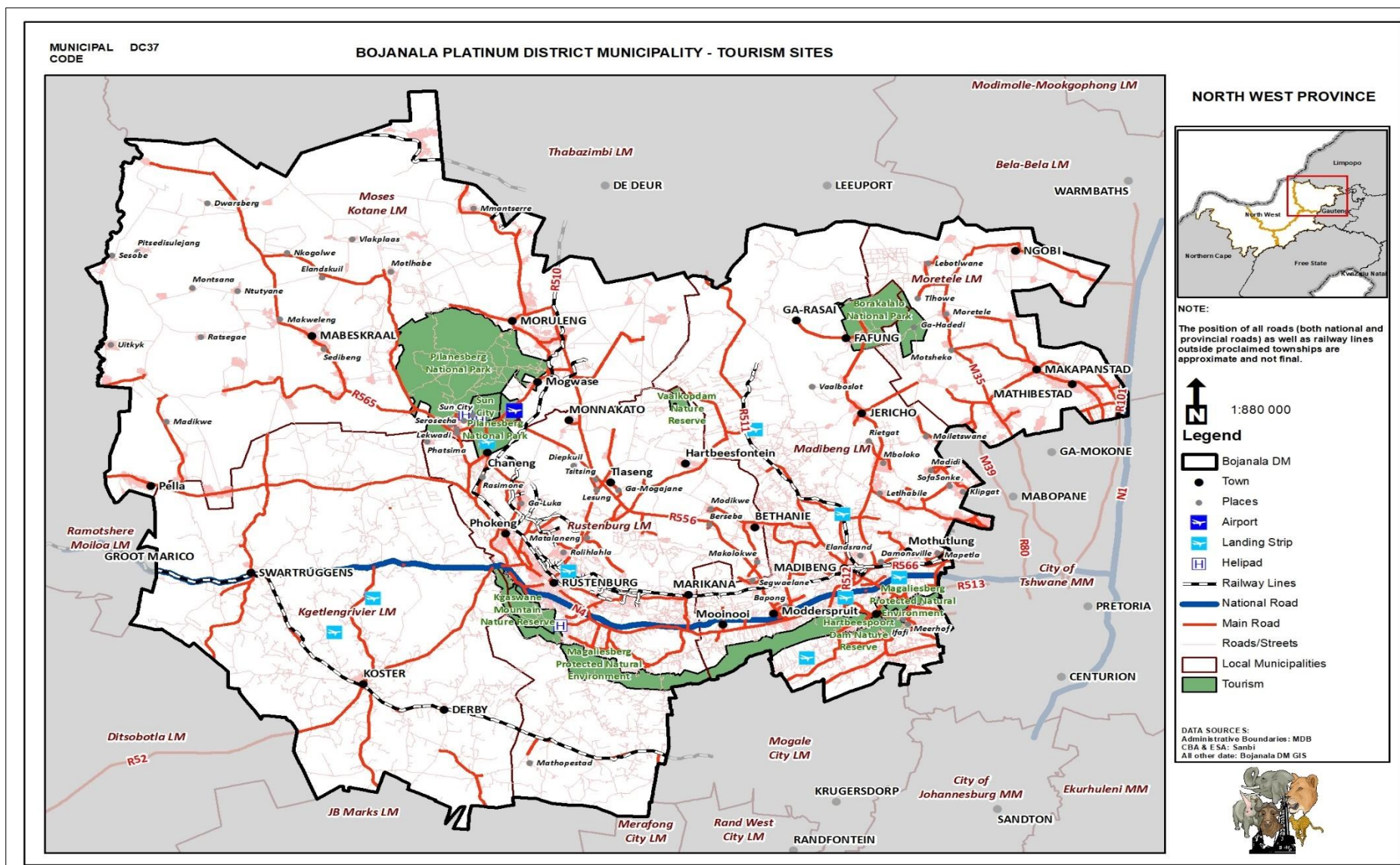
Apart from the above, there are also numerous other historical heritage resources in the BPDM. These include buildings (Preller House, rondavel house and cemetery, Pelindaba, as well as other

historical houses in Karee Road, and Fourie House No. 1, De Kroon, all located in the Madibeng Municipality, Schoch House, Boschdal, Boekenhoutfontein, Dutch Reformed Church and Old Anglican, as well as the Old Lutheran School (Library) and Old Lutheran Church in Kroondal, as well as a sawn-off stump of an ancient syringa tree in Rustenburg under which the Reformed Church was found.

Lastly, there are also a number of battlefields from the Anglo Boer war (Nooitgedacht, Kommandonek, Silkaatsnek, Buffelspoort, Dwarsvlei, Tweefontein, Kalkheuwel, etc.).

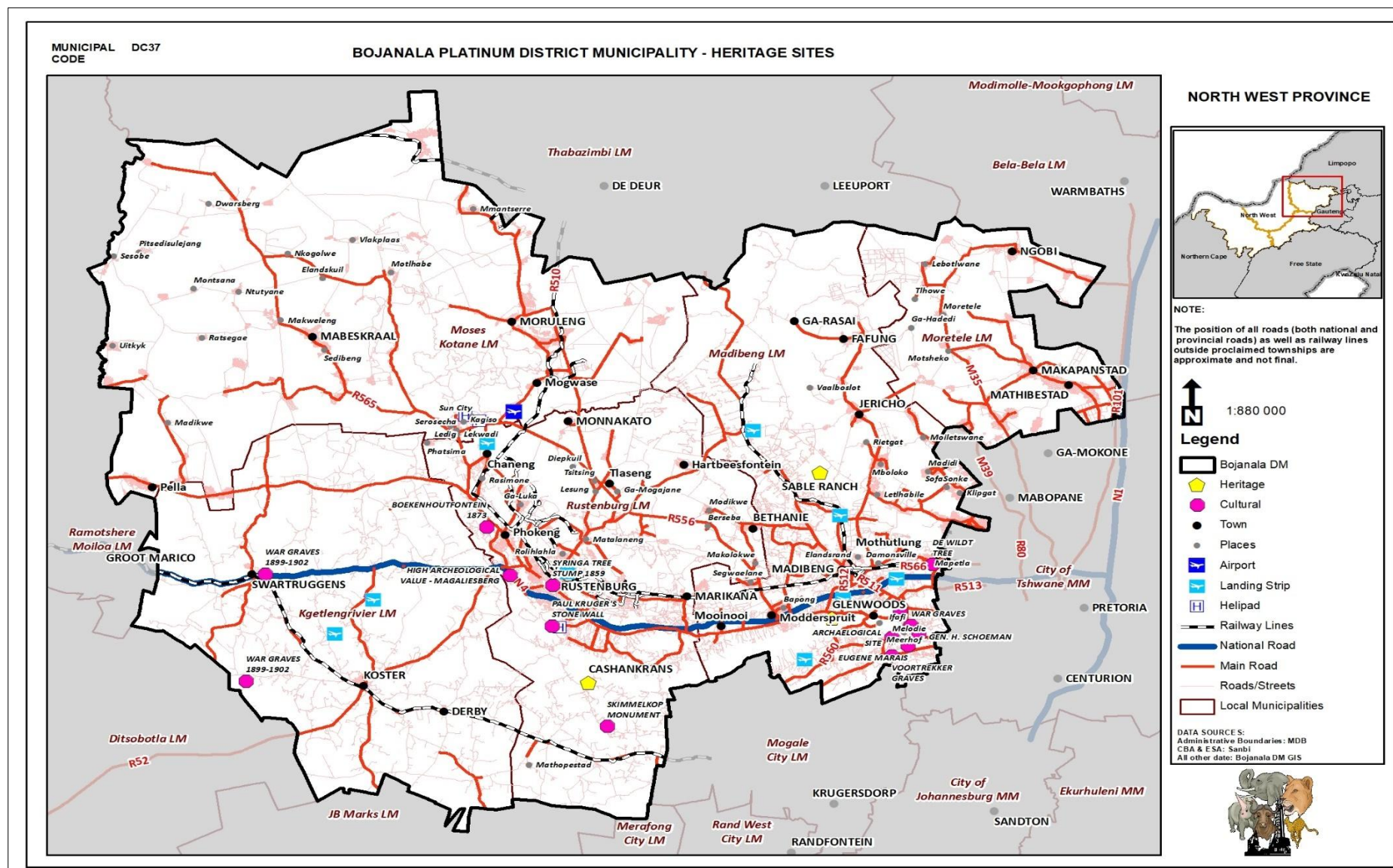


Map 37: Tourism Sites within the BPDM





Map 38: Heritage Sites within the BPDM





3.4.13 Cross-Border Analysis For BPDM

3.4.13.1 Cross-Border Introduction

Purpose of Cross-Border Analysis

Cross-border analysis plays a critical role in spatial planning, especially in a world where geographic, economic, and cultural boundaries are becoming increasingly fluid. The need for cross-border spatial analysis has grown in relation with globalisation, urbanisation, and regional integration efforts especially in the Southern African Development Community (SADC). The Trans-Kalahari Corridor (TKC) is a key trade route connecting South Africa, Botswana, and Namibia, facilitating regional integration (SADC), trade, and economic growth. The corridor runs from Gauteng in South Africa through BPDM in the North West Province, then into Botswana via the Pioneer Gate border post in Lobatse, and onward to Namibia's Walvis Bay.

Cross-Border Relations between TKC and Bojanala Platinum District Municipality

Bojanala Platinum District Municipality is strategically located along the TKC and plays a crucial role in cross-border trade, transport, and economic collaboration. The key aspects of its cross-border relations include:

a) Trade and Economic Integration

BPDM is rich in mining activities, particularly platinum, and the TKC

facilitates the export of minerals to international markets through Namibia's Walvis Bay port. In addition, the corridor supports cross-border supply chains, linking BPDM's industries with markets in Botswana and Namibia.

b) Transport and Infrastructure Development

The corridor enhances road infrastructure, easing the movement of goods and people between BPDM, Botswana, and Namibia as well as investments in logistics hubs and border facilities thereby improving trade efficiency.

c) Tourism and Cultural Exchange

The TKC boosts tourism by linking BPDM's attractions such as Pilanesberg National Park, Sun City and so forth with international tourists arriving via Namibia and Botswana. Moreover, cultural exchanges and cross-border events strengthen regional ties.

d) Regional Cooperation and Policy Coordination

The BPDM engages in regional forums to align trade policies, customs procedures, and transport regulations along the TKC. Furthermore, cross-border security measures help combat smuggling and illegal activities along the route.

e) Employment and Socio-Economic Impact

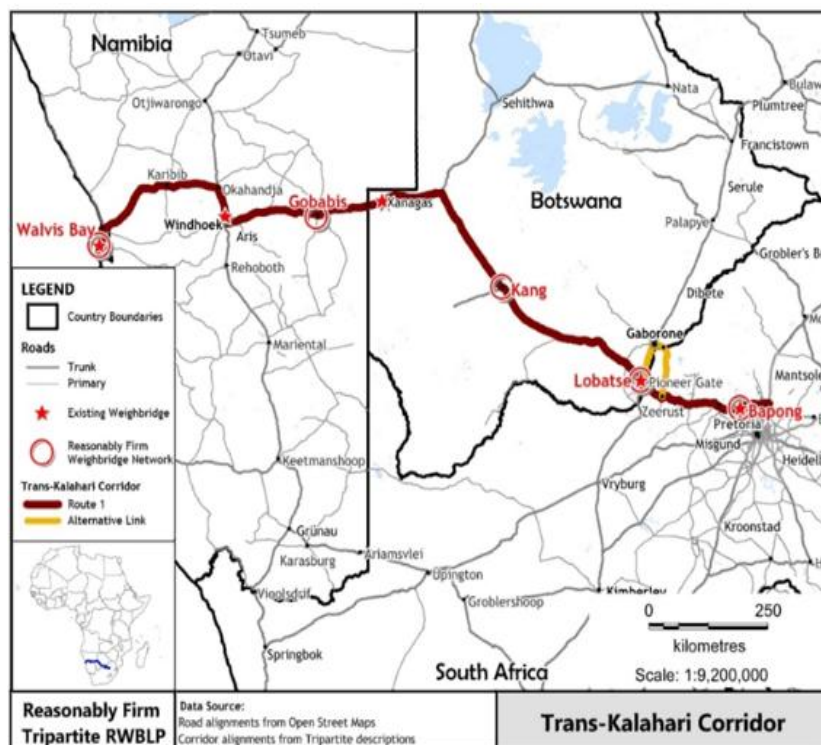
The TKC promotes employment through transport, trade, and tourism sectors. Labour migration between BPDM and neighbouring countries (Namibia, Botswana, etc.) contributes to workforce mobility.



Challenges and Opportunities

- Challenges includes border delays, regulatory differences, and road maintenance issues often hinder trade.
- Opportunities includes improved infrastructure, harmonised trade policies, and regional economic agreements that will enhance the corridor's effectiveness.

Figure 43: TKC Illustration



Source: <https://httpf.org/corridors/trans-kalahari-corridor-2/>

North-South Corridor (NSC) cross-border relation with BPDM

The North-South Corridor (NSC) is a significant trade route in Southern Africa, extending from the port of Durban in South Africa through Zimbabwe and Zambia to the Democratic Republic of Congo. While the NSC primarily traverses the eastern regions of South Africa, its influence extends to various districts, including the BPDM in the North West Province. Although BPDM is not directly situated on the NSC, it engages in cross-border relations influenced by the corridor through several key aspects:

a) Economic Integration and Trade

Mining Exports: BPDM is renowned for its rich mineral resources, particularly platinum. The NSC facilitates the export of these minerals to international markets via the port of Durban, enhancing trade opportunities.

Agricultural Trade: Agricultural products from BPDM find markets in neighbouring countries along the NSC, promoting regional economic integration.

b) Transport and Infrastructure Development

Connectivity Enhancements: While BPDM is primarily connected by the N4 highway which is part of the Trans-Kalahari Corridor, linkages



to the NSC via connecting routes improve access to the regional markets.

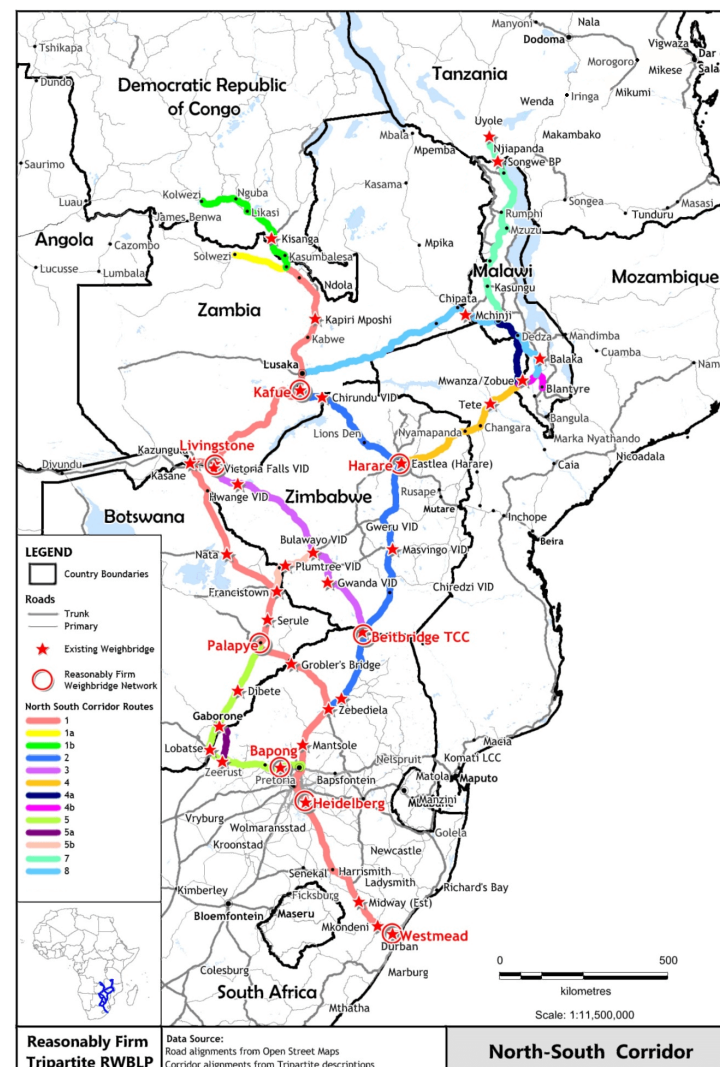
Logistics Hubs: Development of logistics centers within BPDM supports the movement of goods to and from the NSC, optimising supply chains.

c) Challenges and Opportunities

Infrastructure Gaps: Ensuring seamless connectivity between BPDM and the NSC requires continuous infrastructure development and maintenance.

Economic Diversification: Leveraging the NSC's reach can help BPDM diversify its economy beyond mining, tapping into manufacturing and services. In a nutshell, though the Bojanala Platinum District Municipality is not directly on the North-South Corridor, its cross-border relations are significantly influenced by the corridor through enhanced trade, improved infrastructure, regional cooperation, and cultural exchanges. These interactions contribute to the district's economic growth and integration within SADC region.

Figure 44: North-South Corridor Illustration



Source: <https://htfp.org/corridors/trans-kalahari-corridor-2/>



3.4.13.2 Inter-Municipal Relations

In South Africa, interactions and collaborations between municipalities are referred to as inter-municipal relations. These relationships are a subset of the broader IGR framework, which encompasses the interactions among the national, provincial, and local spheres of government. Moreover, inter-municipal relations refer to the collaborative interactions and partnerships between different municipalities. These relationships are essential for enhancing service delivery, promoting regional development, and addressing shared challenges across municipal boundaries.

Key Aspects of Inter-Municipal Relations

a) Collaborative Service Delivery

Shared Services Agreements – Municipalities may enter into agreements to jointly provide services such as waste management, water supply, and emergency services, optimising resources and expertise.

Infrastructure Development – Collaborative planning and investment in Capital infrastructure projects, like transportation networks and utilities, which then benefits multiple municipalities within a province of adjacent provinces, district and so forth.

b) Economic Development Initiatives

Regional Economic Partnerships – Municipalities work together to attract investment, promote tourism, and support local businesses, fostering economic growth that transcends between individual municipal boundaries.

IDP – Coordinated development plans to ensure that economic activities are harmonised, preventing duplication and promoting sustainable growth.

c) Environmental Management

Joint Conservation Efforts: Collaborative management of natural resources, such as river basins or plains and protected areas, helps preserve a particular biodiversity and ensures sustainable use of environmental assets as NEMA advocates for.

Disaster Management: Municipalities coordinate responses to natural disasters, sharing resources and information to effectively mitigate and manage such risks.

d) Capacity Building and Knowledge Sharing

Training Programs – Municipalities organise joint training sessions and workshops to build administrative and technical capacities among their



staff. Best Practice Exchanges – Sharing successful strategies and solutions enables municipalities to learn from each other and implement effective governance practices.

Legislative and Institutional Framework

The South African Constitution emphasises the importance of cooperative governance among the national, provincial, and local spheres of government. The Intergovernmental Relations Framework Act of 2005 provides a structured approach for these interactions, promoting coordinated and efficient service delivery. This Act establishes mechanisms for municipalities to engage in formal intergovernmental structures, facilitating collaboration and dispute resolution.

Additionally, SALGA plays a pivotal role in fostering inter-municipal relations by:

- Advocacy – Representing municipal interests at provincial and national levels.
- Support – Providing guidance and resources to municipalities for effective governance.
- Coordination – Facilitating platforms for municipalities to collaborate and share knowledge.

Through these frameworks and institutions, inter-municipal relations in South Africa is then structured to promote cooperative governance, enhance service delivery, and drive socio-economic development across provinces as well municipalities.

The Bojanala Platinum District Municipality is located in the North West Province of South Africa. It is one of the four district municipalities in the province and includes a number of towns and cities, such as Rustenburg, Brits, Koster etc. The district is part of the larger Brits-Rustenburg urban corridor and is strategically positioned in the northern part of the province, close to the boundary with Gauteng.

The following are the key Inter-Municipal Relations to Bojanala Platinum District Municipality.

- **City of Tshwane Metropolitan Municipality (Gauteng Province)**

To the east of Bojanala Platinum is the City of Tshwane, which is part of Gauteng Province. Tshwane includes Pretoria, the administrative capital of South Africa. This proximity makes Tshwane an important economic and administrative partner for Bojanala, especially in terms of trade, infrastructure, and economic development.

- **Dr Kenneth Kaunda District Municipality (North West Province)**



To the south of Bojanala Platinum District Municipality is the Dr Kenneth Kaunda District Municipality, which includes cities such as Klerksdorp and Stilfontein. JB Marks local municipality is part of Dr Kenneth Kaunda District Municipality and it shares a boundary with Bojanala Platinum District Municipality. It is connected to Bojanala through geographical proximity, economic ties, service delivery and regional collaboration. The economic activities in both regions are linked particularly through mining, agriculture, and trade.

- **Ngaka Modiri Molema District Municipality (North West Province)**

To the west of Bojanala Platinum district municipality is Ngaka Modiri Molema District Municipality, with Mahikeng town as the provincial capital of North West province. There is significant interaction between these two districts, particularly in terms of governance, development projects, and regional infrastructure.

- **Waterberg District Municipality (Limpopo Province)**

To the North of Bojanala Platinum, in the Limpopo Province, lies the Waterberg District Municipality. This area is known for its mining and agricultural activities, and it shares economic links with Bojanala, particularly in the northern parts of the district that enjoys the same boundary as Limpopo province. Waterberg district municipality shares

the municipal boundary with Bojanala Platinum district municipality through Bela-Bela local municipality formerly known as Warmbaths and Thabazimbi local municipality.

- **West Rand District Municipality (Gauteng Province)**

In some areas, BPDM shares municipal boundaries with the West Rand district in Gauteng. This region is more industrialised, with significant mining and manufacturing industries. There are inter-municipal relations collaboration on several economic initiatives, including logistics and transportation; both of these municipalities are also heavily involved in mining activities.

3.4.13.3 Push and Pull Factors

The BPDM is shaped by a variety of socio-economic dynamics that influence migration patterns in and out of the district (Push and Pull factors). On the one hand, many residents, particularly in areas like Moretele and Kgetlengrivier, face lack of vast economic opportunities, high unemployment rates, poverty and limited access to basic services. These hardships serve as powerful push factors, prompting residents to seek better opportunities elsewhere, often migrating toward more developed urban centres. The lack of a University within the BPDM also plays part in the migration of people seeking for access to this opportunity elsewhere.



However, the BPDM also presents several strong pull factors. Most notable is its thriving mining industry, especially platinum mining, which continues to attract thousands of labour migrants from various areas. Major areas like Rustenburg and Brits offer better employment prospects, improved access to services, and infrastructure that attracts people. Additionally, the Bojanala Special Economic Zone (SEZ), being established with the aim to attract investment and create jobs, it is expected to further contribute in increasing the district's appeal to in-migrants in search for employment opportunities.

This migration and economic activity have put substantial growth pressure on specific areas within the district. Rustenburg, for example, has become the most populous municipality in the province and is experiencing rapid urbanization, which has increased the demand for housing, public transport, education, and healthcare. Similarly, Brits, is expanding due to its proximity to Pretoria and growing industrial base, including renewable energy projects. Meanwhile, Mogwase, is growing as a result of mining activity and its location near tourism attractions like Sun City and Pilanesberg National Park. This migration towards major areas contributes to the increasing growth of informal settlements and their accompanying challenges.

3.4.13.4 Socio-Economic Factors

Economic sectors and initiatives - Mining is a significant contributor to the economy and GDP of BPDM and the surrounding district municipalities. Rustenburg Platinum Mines and Marikana Platinum Mines are the two largest mining houses operating within the area. Agriculture is another important sector in this district municipality with many farms producing crops such as maize, sunflowers and wheat to name a few. BPDM promotes tourism with attractions such as Pilanesburg Game Reserve, Madikwe Game Reserve and the Rustenburg Nature Reserve just to name a few.

- Dr Kenneth Kaunda District Municipality is mainly composed of mining, agriculture and manufacturing.
- City of Tswane Metropolitan Municipality economic sectors include technology and innovation, manufacturing as well as services
- City of Johannesburg Metropolitan Municipality economic sectors include finance and business services, manufacturing as well as Tourism.

BPDM has strong economic ties and inter-municipal relations with Madibeng and Thabazimbi local municipalities in areas such as trade and commerce, labour market as well as infrastructure and services:



Trade and Commerce

BPDM trades agricultural products like maize, wheat and sunflowers to the adjacent municipalities. Moreover, the municipality's mining sector relies on the goods and services from various neighbouring municipalities.

Labour market

Workers from Madibeng and Thabazimbi local municipalities commute to BPDM for mining and agricultural occupations. Additionally, this workers movement facilitates the skills sharing as well as knowledge transfer bolstering inter-municipal relations.

Infrastructure and services

BPDM and the neighbouring municipalities are connected by a road network including the N4 highway, whereas Thabazimbi and Madibeng local municipalities provide healthcare, education, waste management to the residents of BPDM.

Tourism

BPDM and the neighbouring municipalities' boast game reserves, cultural heritage sites and natural attractions sites such as the Pilanesburg and Magaliesberg Nature Reserves.



3.5 SPATIAL CHALLENGES, OPPORTUNITIES & SWOT ANALYSIS

The BPDMSDF is influenced by geographical, economic and social considerations, and in order to create a successful and sustainable DMSDF, it is essential to identify and address the key challenges and opportunities identified during the analysis of the 3 key influencing sections. Thus, the development of Table 40 below provides an outline of the spatial challenges and opportunities identified, with Table 41 bringing forth the SWOT analysis of the BPDMSDF.

Table 40: Spatial Challenges & Opportunities

SPATIAL CHALLENGES	SPATIAL OPPORTUNITIES
Inadequate maintenance of internal roads and stormwater systems	Upgrading and maintenance of road and stormwater infrastructure in the BPDMSDF
Unlicensed landfill sites within the District Municipality	District-wide initiative to establish formal licensed landfill sites.
Increased housing demands are leading to informal settlements and urban sprawl.	Commence the formalisation and upgrading of informal settlements alongside the allocation of land for human settlements (social housing initiatives).
Uneven job distribution and spatial inequality leaving youth and women in peripheral areas with limited access to mining-related employment opportunities as well as economic development and infrastructure investment.	The presence of major mining activities, especially platinum mining, offers opportunities for economic development, job creation, and infrastructure investment.
Limited access to basic services like water, sanitation, and electricity and provision backlogs of such services in rural and informal areas, limiting the ability to support rapid development.	Provision of basic services in alignment with priority areas and initiatives to address backlogs.
Conflicting land uses	Spatial justice initiatives
Road and rail infrastructure in some areas is insufficient to support economic growth.	Accessibility through key transport routes like the N4 and other provincial roads to other major areas & opportunities for enhanced connectivity for freight transport and regional trade
Lack of clear land tenure in pockets of land suitable for development.	Fast-tracking land claims within the district to promote land development.
Inadequate project priority alignment for tourism development potential in the district.	Opportunities to develop tourism infrastructure, eco-tourism, and cultural tourism initiatives through initiatives that enhance tourism.
No housing strategy policy guiding the District Municipality	Development of a district-based housing strategy program.
Underutilisation of potential development land pockets within the district.	Development potential in strategic areas for commercial, residential, and mixed-use developments.
Urbanisation and the growth of the key economic sectors are leading to the degradation of land.	Policy guidance on the sustainable growth of key economic sectors within the district.

DRAFT BPDMSDF SPATIAL DEVELOPMENT FRAMEWORK



Table 41: SWOT Analysis

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
- A large proportion of the population is within the working age, providing a potential labour force for economic activities in centres of influence or concentration centres.	- High unemployment rate among the youth populous, and inadequate skills due to the lack of investment in educational and vocational training facilities.	- There is a need for skill development programs, which can be an opportunity to improve employment prospects for residents.	- Lack of funding from the government and private sector for skills development programs. - High crime stats in centres of influence or concentration centres. - Back yard dwellings which affect municipal service delivery to the planned population and also municipal revenue collection
The presence of mining, tourism and agricultural sectors allows for economic diversification and resilience against market fluctuations.	- Uneven spatial distribution of economic benefits	Integrated regional economic planning.	- Land use conflicts and environmental degradation. - Areas intended for conservation are also areas where mining is taking place, high-value tourism, and urban areas are developing.
- The district's proximity to Pretoria, Zeerust, and Bela-Bela offers access to major markets, tourism, and trade, with the N4 and N1 highways enhancing connectivity and goods movement.	The district's economic activities and growth are influenced by its proximity to major urban centres outside the BPDM, which create a pull factor that attracts residents and workforce migration.	Leveraging local assets which focus on optimising existing industries, upgrading through technology innovation, value addition in agriculture, mining and tourism.	Proximity to other major urban areas results in economic leakage, reducing local investment and hindering sustainable development within the district.



STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
- Rich in natural resources, particularly in mining (platinum and other minerals), contributing to economic growth.	Spatial inequality in mining economic benefits.	- Expansion of the mining sector, as well as Mining beneficiation for local communities	Over-reliance on mining leading to environmental degradation. - high cost and unreliable electricity, including illegal mining, copper cable theft.
There is tourism potential through attractions such as the Pilanesberg National Park and Sun City, including rich cultural and historical sites that contribute significantly to tourism revenue and job creation.	There is inadequate infrastructure (roads, water, sewage), particularly in rural areas, affecting access to potential tourism areas.	Collaborations between the municipality and the private sector (PPP's) can lead to better resource management and infrastructure developments.	Tourism can put pressure on the environment, including water sources and biodiversity.
The district has fertile land for agricultural activities, providing opportunities for food security and rural employment.	- Inadequate skill levels of emerging farmers, together with limited agro-processing facilities. -Land use conflicts	Establishment of Skills improvement programs for emerging and potential farmers. Including the establishment/funding for agro-processing facilities and other essential agricultural infrastructure.	- Climate change poses a threat to agriculture and water resources, impacting food security and livelihoods. -Housing developments, Tourism and Mining activities encroaching on prime agricultural land.
Availability of land for development.	- Political instability or conflicts can undermine governance and development projects in the municipality. -Land allocated by tribal authorities to people, wherein there are no formal studies and feasibility, creates a lot of challenges such as floods and all the environmental factors, together with protests for services.	- Strengthening of relations with traditional authorities to improve service delivery	- Land under traditional authority may hinder potential development. -Communal Property Associations (CPA's) are claiming prime agricultural land, and thus being a threat to the economy.



STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Reduced landfill dependency through improved waste diversion.	Unequal access to recycling facilities across the district	Investment in improved waste diversion practices, promoting recycling programs to reduce landfill dependency.	Illegal dumping and environmental hazards.
Planned settlement growth.	-Challenges in housing provision -Dispersed settlement pattern within the municipality hinders service delivery provision.	Formalising informal settlements and housing developments, providing mixed areas where housing is located near schools and jobs.	Sprawl of settlements towards the sensitive ecological areas.



4. SPATIAL PROPOSALS



4. SPATIAL PROPOSALS

The Spatial Challenges and Opportunities outlined in the previous chapter highlight the fundamental elements essential for sustainable development. These include the need for basic infrastructure and development to support the disadvantaged, economic growth, environmental conservation, and the improvement of livelihoods. These spatial development priorities serve as the foundation for informing decisions about the desired spatial development, land use arrangements, and the allocation of investment and development resources within BPDM.

This chapter presents the Spatial Framework and Development Strategies, which aim to guide future growth and change in a manner that preserves and enhances natural resources, biodiversity, and quality of life. Achieving this requires a sustainable development approach focused on efficient land and infrastructure utilization, supported by management decisions that minimize ad-hoc and dispersed development.

The Development Strategies outline four (4) Strategic Objectives, each associated with a set of Spatial Development Strategies, Strategic Focus Areas, and Strategic Projects.

The future growth scenarios are defined, establishing both baseline and sustainable growth targets.

4.1 STRATEGY DEVELOPMENT

The development strategies outlined in BPDM must align with the objectives of the National Development Plan Vision 2030 (NDP) and relevant international, national, and municipal policies, principles, and initiatives aimed at reducing poverty and inequality over the next two decades. NDP sets out the desired socio-economic outcomes, mechanisms for achieving them, and the conditions required to direct strategic priorities.

The key socio-economic outcomes include:

- Economic growth and employment creation
- Advancing education, training, and innovation
- Expanding social protection

The mechanisms required to achieve these outcomes encompass:

- Economic infrastructure development
- Transformation of human settlements
- Promoting environmental sustainability and resilience
- Fostering an inclusive rural economy



The necessary conditions for success include:

- Building a capable and developmental state
- Combating corruption
- Cultivating supportive, safe, and cohesive communities

4.1.1 Spatial Development Values

To effectively plan and manage the spatial implementation of development within BPDM, it is essential that all stakeholders align on core values that will shape the future spatial structure. These core values are designed to foster integration among stakeholders by improving connections between sector programs, infrastructure, social services, government expenditure, private sector investment, and economic development.

The recommended core values for BPDM are as follows:

- **Environmental Integrity and Sustainability:** Achieving a balance between preserving natural resources, enhancing community livelihoods, and fostering a thriving economy.
- **Optimal Utilisation of Existing Resources:** Maximising the use of agriculture, renewable energy potential, minerals, transportation and social facilities.
- **Reduced Settlement Sprawl:** Promoting more compact, formalised settlements through densification, infill development and diverse mixed land uses.

- **Sustained and Inclusive Economic Growth:** Driving rapid economic growth that is both sustained and inclusive.
- **Targeted Government Investment:** Directing government spending on fixed investments toward areas with economic growth or potential, thereby attracting private sector investment and stimulating sustainable activities and long-term employment opportunities.
- **Productive Land Uses for Economic Growth:** Developing productive land uses to create economic opportunities that drive growth, job creation, and expansion of the tax base, ultimately boosting municipal income for enhanced public sector investment in social upliftment.
- **Addressing Low Economic Potential Areas:** Focusing investments on projects and programs that address poverty and provide essential services to rectify social inequalities.
- **Strategic Capital Investment:** Channelling strategic investments in future settlements and economic development into activity corridors and nodes connected to main growth centres, transforming them into regional gateways.
- **Urban-Rural Integration and Synergy:** Enhancing linkages between urban and rural areas, supported by appropriate infrastructure.



- **Community-Based Spatial Planning:** Ensuring enforceable land use management based on each local municipalities by-laws, supported by unified provincial legislation.
- **Correction of Historical Spatial Distortions:** Optimizing the use of existing infrastructure and integrating residential and employment opportunities to rectify historically distorted spatial settlement patterns.
- **Development of Rural Areas:** Supporting the economic development of rural areas through the Comprehensive Rural Development Programme (CRDP).
- **Monitoring and Evaluation:** Establishing robust monitoring and evaluation systems to track the progress and effectiveness of service delivery and ensure continuous improvement.

4.1.2 District Spatial Development Scenarios

Future growth possibilities for the district, in light of historical trends and dynamics, can be captured in at least two potential growth scenarios:

1. **Low Growth, Inequitable Share Development Scenario (Baseline Scenario):** This scenario assumes the continuation of existing trends, where growth remains slow and unequal, exacerbating current disparities.

2. **High-Growth Scenario:** This scenario envisions growth driven by strategic interventions, such as development management tools and spatial development plans. These interventions would shift current trends toward a higher growth trajectory and a more sustainable outcome. The high-growth scenario would involve compact, formalized development in integrated settlement regions, with productive rural resources linked to economic growth in Cities and Large Regional Centres, Regional Service Centres, Service Town, Small Service Town, Small Service Town and Service Settlement & Local Town/Settlement Node & Rural Settlement Areas & Villages.

Each scenario is discussed in more detail below:

Scenario 1: Baseline – Low Growth: Inequitable Share

In this scenario, urban growth is expected to occur in the large regional centre, regional service centre, immediate adjacent rural areas and along key transport corridors over the next 15 to 20 years. The key characteristics of this scenario are as follows:

- **Private Sector Investment:** Strong private sector investment in high-growth areas (such as Rustenburg and Brits), accompanied by a significant need for infrastructure upgrades.
- **Government Expenditure:** Broad-based government spending aimed at addressing social needs in poverty-stricken areas such as Freedom Park and the Marikana Belt.

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- **Economic Development Concentration:** High concentration of economic development in Rustenburg, serving as the regional centre.
- **Population Growth:** High population growth is anticipated to continue in the regional centres of Rustenburg and Brits due to ongoing urbanisation.
- **Rural Population Growth:** Moderate population growth is expected to continue in rural settlement areas (i.e Mankwe, Bellantlokwe and Maumong)

This scenario would likely lead to several development challenges, including:

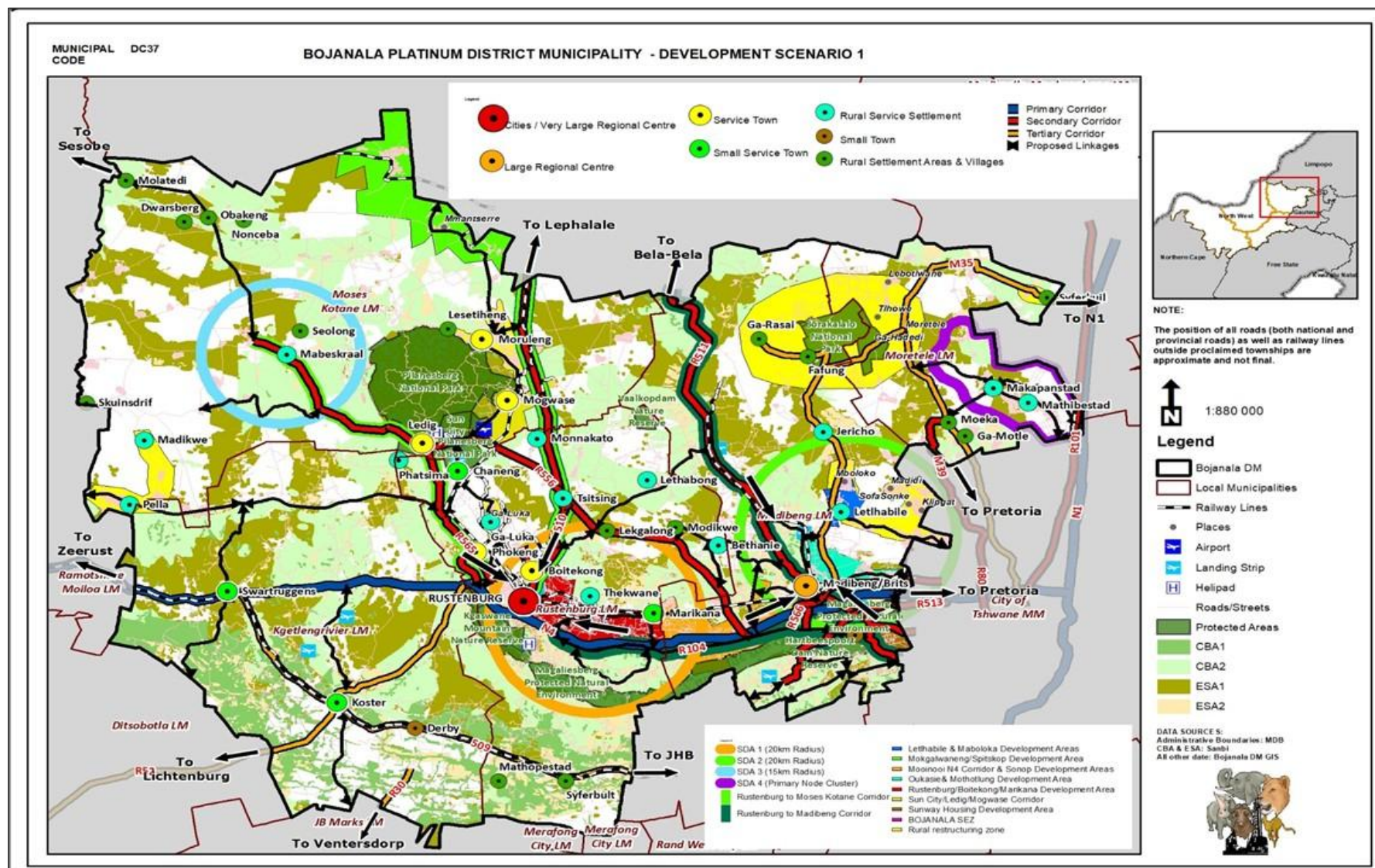
- **Environmental Degradation:** Increased pressure on areas designated for conservation, leading to potential destruction of biodiversity hotspots. Precious natural resources, such as forests and agricultural soils, could be depleted, and grazing land for rural households may disappear (i.e Kromkuil).
- **Rural-Urban Migration:** If rural areas are not improved to prevent migration, urban areas could become overpopulated. This would strain resources, infrastructure, and facilities, requiring reactive government responses rather than proactive planning for future growth.

- **Land Resource Strain:** Vacant land resources, including agricultural land, would be fully developed over time. The complex land release process would hinder urban expansion, resulting in a shortage of available land for development. Property values would increase, raising rents and living costs to unsustainable levels.
- **Infrastructure Overstretch:** Unchecked urban sprawl would strain infrastructure resources, requiring ongoing government investment in unsustainable settlements. Some towns would face overstretched infrastructure, with negative implications for service delivery and quality of life.
- **Economic Imbalance:** The current imbalance between population growth, job creation, and economic opportunities would persist, contributing to continued economic stagnation and high levels of unemployment.

Clearly, the baseline scenario is not the ideal choice for addressing future growth within the district. It would continue to perpetuate existing challenges, making it essential to explore alternative, more sustainable growth strategies.



Map 39: Development Scenario 1





Scenario 2: High-Growth (Optimistic Viewpoint) – Growth Intervention Development

The high-growth scenario represents a more optimistic vision for the district's future. However, achieving this scenario requires direct and decisive interventions through carefully planned, public sector-driven actions. The future development should be guided by economic rationale, where investments are directed to areas with the highest potential for impact. This approach will lead to a more efficient and sustainable spatial development pattern with the following key features:

Key Features of the High-Growth Scenario:

- **Private Sector Investment:** Strong private sector investment will be concentrated in high-growth areas, supported by targeted government infrastructure investments that amplify the growth effect and generate tax revenue from productive investments.
- **Government's Role in Infrastructure:** The responsibility for infrastructure upgrades will lie with the government, not the private sector, ensuring that the necessary infrastructure development is in place to support future growth.
- **Private Sector Confidence:** The private sector will respond positively to these efforts, leading to greater confidence and

increased investment, which will, in turn, create more tax revenue.

- **Targeted Government Investment:** Government investment will be strategically focused on high-potential nodes (such as Boitekong and Phokeng), and corridors in low-growth areas (Such as Koster and Pella), enhancing their attractiveness for private sector investment. Large-scale private sector investments will have a greater impact on job creation and economic success compared to smaller, government-funded entrepreneurial projects.
- **Shift in Government Priorities:** The focus will gradually shift from government investment into social services and non-revenue-generating housing to income-generating commercial developments, which will help create jobs and expand the tax base.

Planning Considerations for the High-Growth Scenario:

Land Use Management:

- The growing demand for urban land will necessitate integrated and transparent land-use planning and management systems at the local level to resolve potential land-use conflicts.



- Planning must also address land allocation and management in rural areas, resolving conflicts between local government and traditional authorities.

Settlement and Transportation Planning:

- A strong local planning capacity will be crucial to provide well-located and serviced urban and peripheral areas.
- Over the next 15 to 20 years, improved settlement planning should formalise compact settlements along effective transport routes, ensuring better connectivity between urban areas and economic/labour nodes.
- Informal townships will need to be formalised, serviced, and provided with essential social and educational facilities. Accessibility to these areas must be improved to ensure proper linkages to economic opportunities.

Economic Development:

- **Employment Creation:** A focus on creating jobs in rural areas and towns will require government facilitation of business investment and growth. Key sectors for growth include agriculture, mining, energy, manufacturing, trade, finance, business services, government services, and construction.
- **Small Business Development:** Encouraging the establishment and growth of small businesses, which are more labour-

intensive and better suited to rural areas, will be vital. Key constraints on business growth, such as lack of land tenure, skills, market information, and access to credit, must be addressed.

Infrastructure:

- Successful implementation of integrated infrastructure development will be central to sustaining both rural and urban growth. Strategic transport corridors should link rural areas to urban centres, supporting the flow of goods, people, and services.
- Integrated infrastructure programs should focus on high-potential economic zones.

Human Resource Development:

- Addressing coordination and capacity constraints in key provincial departments and agencies is critical for effective policy implementation. Without efforts to improve coordination and capacity, development plans will be ineffective, and chaos could ensue as different departments pursue their own agendas at the expense of others.

Governance:

- Without addressing overlapping legislation and policy instruments, irreversible environmental damage may occur. The implementation of the Spatial Planning and Land Use

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Management Act (SPLUMA) should ensure a coordinated planning system at the national and provincial levels.

- A long-term vision of formalising compact settlements will require coordination and cooperation across all spheres of government and relevant stakeholders, particularly in Peripheral urban areas (which are the areas on the Outskirts of the established towns and cities often characterised by informal settlements, underdeveloped infrastructure and limited access to essential services. These Periurban lands are mostly prominent in municipalities such as Rustenburg, Madibeng and Moses Kotane local municipalities, which are experiencing rapid urbanisation driven by mining activities and associated economic activities) and rural areas.
- Lack of coordination and capacity directly impacts the quality of development management, resulting in scattered, uncoordinated development. A framework is needed to guide spatial planning processes across all government levels.

In a nutshell, the High-Growth Scenario or Scenario 2 requires strategic and decisive interventions across multiple levels of governance and economic sectors. It will create a more sustainable and equitable development trajectory, providing significant opportunities for economic growth, job creation, and improved living standards for the

BPDM/district's residents. However, it will require strong leadership, well-coordinated planning, and substantial public and private sector investment (PPP) to realise its potential.

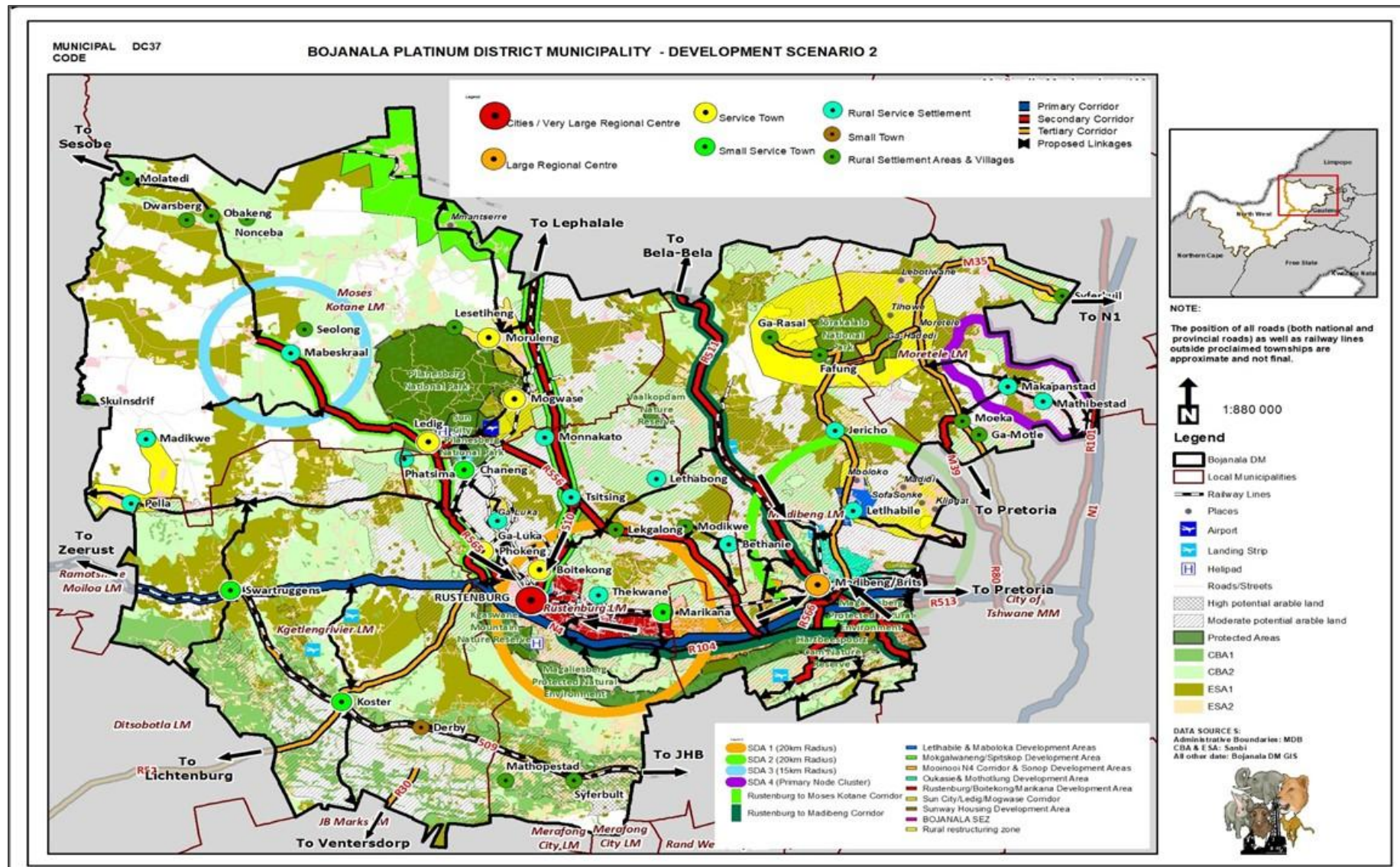
However, achieving this High-Growth Scenario requires direct and decisive interventions through carefully planned, public sector-driven actions. The future development should be guided by economic rationale, where investments are directed to areas or identified nodes on the Settlement Typology with the highest potential for impact. This approach will then lead to a more efficient and sustainable spatial development pattern of BPDM, which encourages socio-economic growth as well as economic diversification from mining to tourism and agriculture.

Undoubtedly, the High-Growth Scenario is the perfect prime for addressing the future growth within BPDM. Moreover, this Scenario would endure, providing long-term sustainable development outcomes to existing spatial challenges, making it essential to explore alternative, more sustainable growth strategies. Therefore, this is the preferred Scenario for BPDM and all Spatial Proposals are based on this High-Growth Scenario or Scenario 2.

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Map 40: Development Scenario 2





4.1.3 Spatial Development Vision

The BPDM possesses a range of unique and significant attributes with considerable development potential, including the environmental quality of life in certain areas, resource availability, a temperate climate, and opportunities for rural development. The district's sizable population presents a strong market, with potential for skills development and growth in the rural economy. The expansion of the informal economy provides substantial opportunities, and the pressures of urbanisation create avenues to improve the quality of life, enhance access to services, and provide greater amenities.

Vision and Mission of the Bojanala Platinum District Municipality:

Vision:

"Bojanala Platinum District Municipality, a model of cooperative governance for effective and efficient service delivery in partnership with local municipalities and all stakeholders"

Mission:

"Coordinate, facilitate and support local municipalities by equitable sharing of resources and maximising community benefit of natural resources in a safe healthy environment"

The BPDM is committed to excelling in planning, coordination, and providing support for local municipalities. In doing so, the district aims to ensure the highest standard of living for all its communities.

Function of the BPDM Spatial Development Framework (SDF):

The SDF operates at a strategic district level, responsible for planning and coordinating the overall spatial structure of the district. It aligns with the policy frameworks set by national, provincial, and local governments, ensuring that the spatial frameworks and policies of local municipalities are integrated and aligned.

Spatial Development Vision:

The future functional spatial development pattern for the BPDM should integrate sustainable natural resources, economic development, job creation, and human development. This vision can be summarised as:

"Sustainable spatial development patterns that integrate and coordinates urban and rural growth, fostering economic opportunities, environmental protection and improved quality of life for all communities"

This vision requires a spatial development pattern that includes well-managed human settlements clustered in settlement nodes and corridors, alongside productive areas, managed ecological resources,



and a network of strategic transportation routes. These areas will be connected to the broader global, national, and provincial economy.

Strategic Requirements for the BPDm:

Several key strategic requirements must be addressed within the future development framework, which underpins the SDF vision for the district:

- **Flexible Development Approach:** Adopt an adaptable approach to development that aligns with the district's unique needs and fosters sustainable growth.
- **Sustainable Infrastructure Development:** Create infrastructure, services, and amenities that attract investment and support long-term development.
- **Integrated Infrastructure Planning:** Plan infrastructure development to meet long-term, forecasted requirements.
- **Proactive Economic Integration:** Incorporate aspiring economic activities into the mainstream economy and urban planning.
- **Resource Safeguarding and Renewable Energy:** Protect existing resources while fostering opportunities for renewable energy development.

- **Development Prioritisation:** Identify and prioritise areas within the district for development.
- **Strategic Connectivity:** Link spatial frameworks to catalytic programs, ensuring implementation is effective and efficient.
- **Improved Quality of Life:** Enhance the quality of life in settlements through formalisation, planned amenities, and consolidated land use.
- **Capacity Building:** Strengthen spatial planning capacity, skills, systems, and procedures to realise the vision.

Key Objectives for the BPDm:

The SDF must serve as an enabling management tool that supports the strategic "developmental state" approach. Specifically, it should:

- Support development in areas identified for active promotion, in line with the policies and strategic objectives of communities, municipalities, and the departments within the district.
- Adapt spatial planning, land use management systems, and policy frameworks to address the unique needs of developmental governance within BPDm.

The fulfilment of these strategic requirements, core values, and guiding principles is essential for achieving consensus on the district's future



spatial vision. Through integrated planning and development, the BPDM will be positioned to create a sustainable, prosperous future for its communities, balancing growth with environmental and social responsibility.

4.1.4 Spatial Development Concept

As an initial step in the development of a comprehensive spatial development strategy for BPDM, a Spatial Development Concept has been formulated. This concept serves as a model for guiding the spatial direction and context of future developments. It aims to promote, clarify, and refine the spatial development principles and priorities, all of which are supported by relevant policies and legislation. The concept also defines the desired spatial form for the BPDM, providing a clear framework for future growth and development. The Spatial Development Concept is illustrated on Map 41.

Strategic Development Areas (SDA's)

SDA refers to a geographically defined area identified by a municipality or government authority as a priority location for spatial transformation, investment, and development, aligned with broader spatial planning goals such as densification, economic growth, infrastructure provision, and spatial justice.

The SDAs are proposed to focus public sector investment and to attract private sector development (PPP) targeted for high-impact urban renewal, infrastructure upgrading, or spatial restructuring.

Purpose of the proposed SDAs (SDA1 – SDA4):

- Reverse apartheid-era spatial segregation by promoting development in areas closer to economic nodes or integrating townships/informal settlements into the urban fabric.
- Enable densification, mixed-use development, and better land use where infrastructure already exists or is planned.
- Leverage state investment to create job-rich, accessible, and vibrant urban environments.
- Align the activities of various departments and spheres of government (e.g. housing, transport, economic development) in one area for maximum impact.

Rural Restructuring Zones

These rural restructuring zones ensures that the development processes are strategically directed and in BPDM the rural restructuring zones were identified as follows:

- in MKLM the rural restructuring zone in Madikwe and Pella is proposed with reference to tapping into the tourism sector as well as land and tenure reform, together with infrastructure

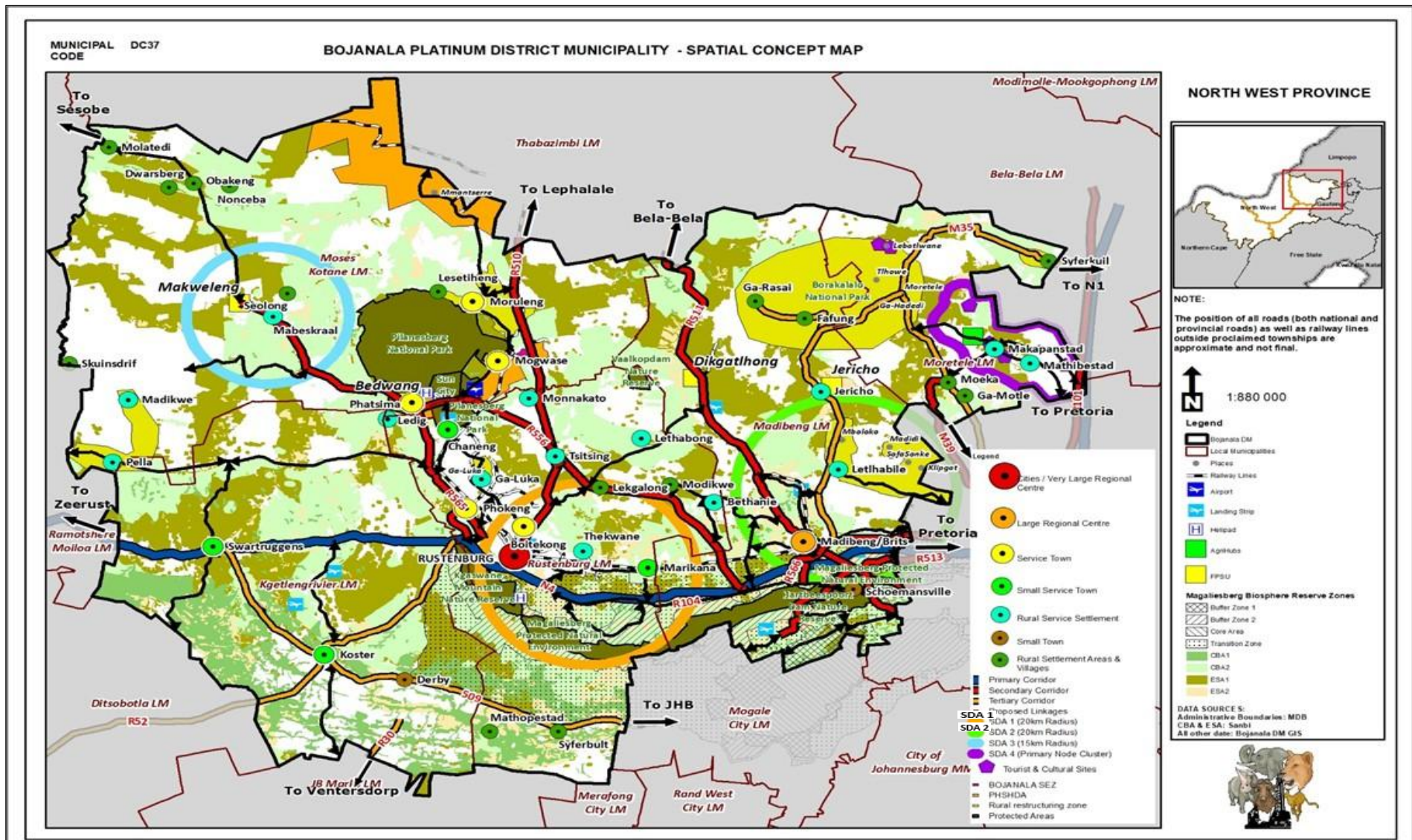


provision. Another one has been proposed Moruleng, with reference to land and tenure reform as well as mining opportunities.

- In RLM, a proposed rural restructuring zone in Galuka is with made with reference to land and tenure reform, economic stimulus, as well as infrastructure provision.
- In MDLM, the rural restructuring zone is proposed Lethlabile with reference to land and tenure reform, economic stimulus, as well as infrastructure provision and mining opportunities. The one around Borakalelo Nature Reserve and both in MDLM and MLM is with reference to infrastructure provision and tapping into the tourism sector (eco-tourism) as well as land and tenure reform.
- In MLM the zone in Syferskuil is with reference to tourism as well as land and tenure reform.



Map 41: The BPDMSDF Spatial Development Concept





4.2 DEVELOPMENT STRATEGIES

A set of interconnected strategic development objectives forms the basis for the spatial development strategies within BPDM, supporting the Spatial Development Concept. Four key strategic objectives have been identified, which provide targeted areas for intervention at the provincial, district, and local levels:

- **Strategic Objective 1:** Protection of biodiversity, water resources and agricultural land.
- **Strategic Objective 2:** Foster sustainable rural development.
- **Strategic Objective 3:** Focus development efforts on regional spatial initiatives, including development corridors, zones and nodes.
- **Strategic Objective 4:** Promote sustainable urban development.

These objectives outline the primary areas of focus for long-term, balanced growth and environmental preservation within the region.

4.2.1 Strategic Objective 1: Protection of biodiversity, water resources, and agricultural land.

4.2.1.1 Spatial Development Strategies

Developing and implementing strategies by the Bojanala Platinum District Municipality and local municipalities, that:

- Sustains biodiversity,
- Protect water resources and maximise the retention of valuable ecological infrastructure,
- Adapts to the impacts of climate change, and
- Protect prime agricultural resources.

4.2.1.2 Strategic focus area

The following key issues should be considered:

Biodiversity:

- ❖ PAs and CBAs:
 - Should be protected and expanded to meet targets in the National Biodiversity Framework (NBF) and National Biodiversity Strategy and Action Plan (NBSAP).
 - Ensure and enable that by 2030 at least 30 percent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively



conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories

❖ Spatial Planning Integration:

- PAs and CBAs need to be included in the spatial development frameworks and planning processes of the district and local municipalities.

❖ Protected Areas Network:

- Establish a network that can support the wildlife economy in Bojanala Platinum District Municipality.

❖ Land Management:

- Incorporate Land Management Objectives from the Northwest Biodiversity Sector Plan 2015 into municipal Spatial Development Frameworks (SDFs) and Land Use Schemes (LUSs).

- Ensure alignment with strategic spatial planning categories and decision-making guidelines.



Table 42: A Framework for Linking the Spatial Planning Categories (CBA Map Categories) to Land Use Planning and Decision-Making Guidelines

CBA MAP CATEGORY	LAND MANAGEMENT OBJECTIVES
<i>Protected Area</i>	As per protected area management plan
<i>Critical Biodiversity Area 1 (CBA 1)</i>	Maintain Natural State: <ul style="list-style-type: none"> Focus on ecosystems and species that are fully or largely intact and undisturbed. Target areas with high irreplaceability or low flexibility in meeting biodiversity pattern targets. Loss of biodiversity features in these areas would result in failure to meet targets. These areas may be beyond their limits of acceptable change.
<i>Critical Biodiversity Area 2 (CBA 2)</i>	Maintain in a natural or near-natural state that maximises the retention of biodiversity pattern and ecological process: <ul style="list-style-type: none"> Areas with some flexibility in meeting biodiversity targets. Ecosystems and species fully or largely intact and undisturbed. Intermediate Irreplaceability Loss of certain biodiversity components is possible without affecting overall targets, but may require adding alternative sites to CBAs. These features are approaching but not exceeding their limits of acceptable change.
<i>Ecological Support Area 1 (ESA 1)</i>	Semi-Natural State Maintenance: <ul style="list-style-type: none"> Ecosystems are in a natural, near-natural, or semi-natural state and have not been developed. Moderately to significantly disturbed ecosystems that can still maintain basic functionality. Individual species or biodiversity indicators may be severely disturbed or reduced. These areas have low irreplaceability regarding biodiversity pattern targets.
<i>Ecological Support Area 2 (ESA 2)</i>	Maintain Ecological Functionality: <ul style="list-style-type: none"> Maintain current land use or restore to a natural state. Ecosystems are substantially modified, not in a natural or near-natural state (e.g., ploughed). Significantly disturbed ecosystems that still maintain some ecological functionality. Species and biodiversity indicators are severely disturbed or reduced. These areas have low irreplaceability for biodiversity pattern targets. Important for maintaining ecological processes, particularly landscape connectivity.
<i>Other Natural Areas and No Natural Habitat Remaining</i>	Production landscapes: manage land to optimise sustainable utilisation of natural areas



4.2.1.3 Management of water resources

Good management of the region's water resources, especially the ecological infrastructure that delivers this invaluable resource, ensuring the following:

- Maintaining the water recharge for all the major rivers and wetland systems including Magaliesberg and the Elandsrivier.
- In addition to the river and wetland features, other important areas for water-related processes include wetland systems, which play a keystone regulatory role in the hydrology of the district by:
 - absorbing and storing freshwater
 - maintaining and moderating the flow of rivers
 - improving water quality
 - maintaining the ecological and structural integrity of river systems
 - buffering surrounding landscapes (and associated land uses) from flooding

Climate change

Providing intact and well-functioning natural ecosystems resilient to the impacts of climate change relative to highly modified (e.g., degraded areas) or anthropogenic landscapes (e.g. croplands, mines, and settlements). Ecological process issues important for climate change

adaptation, which need to be considered in spatial planning development within BPDM include:

Corridors and connectivity:

- Landscape Connectivity for Climate Resilience:
 - Achieved through strategic land use planning that links natural habitats and wildlife corridors.
- Key Ecological Features:
 - Mountains, river systems, and wetlands serve as vital biodiversity corridors, promoting ecological balance in BPDM.

4.2.1.4 Climate change refugia

- Protect Unique Microclimates:
 - Essential for species refuge during climate fluctuations.
 - Enhances ecosystem resilience and supports biodiversity.

Areas for minimising climate change impacts on society:

- Preserve Natural Landscapes:
 - Protect wetlands and flood-prone areas to mitigate flooding and regulate water resources.
- Limit Development in Vulnerable Areas:
 - Restrict infrastructure and agriculture in high-risk zones to protect communities, especially marginalised populations, from climate change impacts.



4.2.2 Strategic Objective 2: Foster sustainable rural development.

4.2.2.1 Spatial Development Strategies

Rural development within the Bojanala Platinum District Municipality needs to promote vibrant, equitable, and sustainable rural communities while ensuring economic opportunities for all. This requires the following interrelated spatial development strategies:

Integration of Urban and Rural Areas

- ❖ Strengthening linkages between rural and urban centres to enhance economic growth and improve service delivery.
- ❖ Facilitating the movement of goods, services, and labour between rural areas and economic hubs such as Rustenburg, Brits.
- ❖ Promoting integrated spatial planning that aligns with municipal, district, and provincial development frameworks.

Increasing the Functionality of Rural Areas

- ❖ Enhancing access to essential infrastructure such as roads, electricity, water and ICT to improve rural livelihoods.
- ❖ Supporting economic diversification in rural areas by promoting agriculture, tourism, and agro-processing industries.

Revitalising Rural Areas

- Encouraging the development of agri-villages and rural enterprises to boost employment opportunities.
- Supporting sustainable land use management to protect prime agricultural land from urban encroachment and mining activities.
- Implementing rural development programs that prioritise social inclusion, poverty reduction, and improved living conditions.

4.2.2.2 Strategic focus areas

4.2.2.2.1 Supporting the interventions promoting rural development

The BPDM, in collaboration with the Department of Rural Development, and Land Reform, promotes integrated interventions to enhance rural development. The following strategic objectives guide rural development within the district:

Objective 1: Security of Tenure

Security of tenure programmes in Bojanala Platinum focus on farm workers, rural villages and informal settlements to ensure equitable access to land and land ownership. These programmes include:

- Land tenure reform,
- Land redistribution, and



- Land restitution.

Rural interventions focus on the following target groups:

- Rural Villages (such as those in Moretele, Moses Kotane and Madibeng LM's).
- Agriculture driven villages to support the agricultural economy.
- Community Property Associations (CPAs) to manage communal land ownership.
- Emerging farmers.
- One hectare/One household projects for small-scale farming initiatives.

Intergovernmental coordination and investment should focus on:

- Providing sustainable rural livelihoods by linking the rural and urban economies.
- Promoting integrated rural development with access to essential services.

Objective 2: Sustainable Human Settlement

Sustainable rural development in Bojanala Platinum includes establishing Rural Development Nodes, which provide:

- ❖ Dignified living conditions with proper housing, public amenities, schools, health facilities, and social welfare services.

- ❖ Infrastructure and service delivery improvements to ensure access to water, sanitation, electricity, and road networks.
- ❖ Integrated economic development to support employment opportunities within rural settlements.

The BPDM must prioritise rural settlements, especially those in Moses Kotane, Rustenburg, Moretele and Madibeng Local Municipalities, by:

- Upgrading informal settlements.
- Providing basic services to previously underserved areas.
- Supporting local economic initiatives linked to agriculture, mining, and tourism.

Objective 3: Resource-Based Economic Activity

BPDM has rich natural resources that should be leveraged for economic growth. The focus should be on:

- Agriculture & Agro-processing:
 - Support emerging farmers and establish Agri-parks.
 - Improve market access for agricultural products.
- Mining & Beneficiation:
 - Promote responsible mining and local beneficiation.
 - Ensure rehabilitation of mined areas.
- Tourism Development:
 - Enhance eco-tourism, cultural tourism, and heritage tourism.



- Focus on key attractions like Pilanesberg National Park, Sun City, and Magaliesberg Biosphere Reserve.

The district must facilitate:

- Public-Private Partnerships (PPPs) to attract investment.
- Skills development to ensure local employment in key sectors.
- Market access and infrastructure improvements to support rural economic activities.

4.2.2.3 Providing functional rural economic nodes and systems

4.2.2.3.1 Create functional rural economic nodes.

Create functional rural economic nodes by rural restructuring and linkage of rural economies, providing for a network of rural urban anchors, supporting the following objectives:

- Strengthening Strategic Rural-Urban Anchor Towns
- The district must prioritise and strengthen key service towns and rural settlements to support economic development in:
- Mining: Rustenburg, Madibeng and Marikana, which are hubs for PGMs and mineral beneficiation.
- Agriculture: Key agricultural regions in Moses Kotane LM, Madibeng LM, Moretele LM and Rustenburg (such as farming area around Kroondal, extending south of the N4 and R104) focusing on agro-processing and commercial farming expansion.

- Tourism: Major destinations like Pilanesberg National Park, Sun City, the Kgaswane Mountain Reserve, Borakalalo National park and the Magaliesberg Biosphere Reserve, which attract both domestic and international tourists.

These towns and settlements should serve as economic anchors that drive regional development and improve connectivity between rural and urban areas.

- Enhancing Regional Connectivity and Infrastructure Networks
- BPDM must ensure that rural economic nodes are strategically located within the regional transport and infrastructure network to:
- Provide well-connected settlements that serve as anchors for economic and population growth.
- Act as markets and infrastructure gateways for agriculture, mining, and other resource-based industries.
- Improve rural-urban linkages to facilitate access to employment opportunities and social services.
- Consolidating Social and Economic Infrastructure Investments
- Rural economic nodes in BPDM should be well-equipped with higher-order services and infrastructure to:



- Support sustainable livelihoods by ensuring access to healthcare, education, and basic services in rural settlements.
- Promote enterprise development by investing in agri-processing plants, local markets, and small business hubs.
- Strengthen rural logistics and market access infrastructure to enhance the distribution of agricultural and mining products.

Presence of key economic sectors within BPDM

The table below presents an overview of the presence and concentration of key economic sectors across various settlements and nodes within the district. This classification is based on observed or documented economic activities, highlighting areas where agriculture, mining, industrial activity, and tourism either exist or hold significant development potential.

Agriculture has areas participating in commercial and subsistence farming activities. Mining, including areas with active or potential mining operations. Industrial having settlements with formal industrial

zones, manufacturing or processing facilities. Tourism areas having tourism attractions, cultural heritage, or ecotourism potential.

Table 43: Nodes & Economic Sectors (according to typology)

Nodes	Economic Sectors			
	Agriculture	Mining	Industrial	Tourism
Rustenburg	✓	✓	✓	✓
Brits	✓	✓	✓	✓
Mogwase	✓		✓	✓
Phokeng	✓	✓	✓	✓
Marikana	✓	✓	✓	✓
Boitekong		✓	✓	
Hartbeesfontein	✓			✓
Ledig	✓	✓		✓
Chaneng	✓	✓	✓	
Moruleng	✓	✓		✓
Koster	✓		✓	✓
Swartruggens	✓	✓	✓	
Mabeskraal	✓			✓
Tsitsing			✓	
Pella	✓		✓	✓
Monnakato	✓			



Nodes	Economic Sectors			
	Agriculture	Mining	Industrial	Tourism
Thekwane		✓	✓	
Ga-Luka		✓	✓	
Lethabong	✓	✓		
Phatsima	✓			
Ga-Rasai	✓			
Fafung	✓	✓		
Dwarsberg	✓			
Madikwe	✓			
Nonceba	✓			
Lesetlheng	✓			
Molatedi	✓		✓	
Obakeng	✓			
Seolong	✓			
Skuinsdrif	✓			
Derby	✓			
Schoemansville				✓
Jericho	✓			
Lethlabile	✓		✓	
Maboloka	✓			

Nodes	Economic Sectors			
	Agriculture	Mining	Industrial	Tourism
Ga-Motle	✓			
Mathibestad	✓			✓
Makapanstad	✓			
Moeka	✓			
Syferkuil	✓			
Bethanie	✓	✓		
Modikwe	✓			
Lekgalong	✓			
Mathopetad	✓			
Syferbult	✓		✓	

Planning Requirements for Rural Areas in Bojanala Platinum District Municipality

- Introduce a rational, systems-based approach to rural development planning, focusing on BPDM as a whole to ensure integrated development.
- Develop and strengthen regional-rural systems that align with the district's economic activities, including mining, agriculture, and tourism.



Develop and strengthen 'regional development anchors' in rural areas to:

- Connect urban centres (Rustenburg, Brits) to surrounding rural areas.
- Act as catalysts for regional-rural economic growth by supporting mining, agri-processing, and tourism.

Explore the delineation of 'rural edges' to protect:

- Unique rural landscapes and cultural heritage sites (such as traditional villages and historical areas).
- Ecologically sensitive areas, including the Pilanesberg National Park and Magaliesberg Biosphere Reserve.

Pursue intra-rural trade as a key element of rural economic cohesion by:

- Supporting small-scale farming cooperatives and local markets.
- Enhancing logistics infrastructure for agricultural and mining products.

Promote greater resilience of rural areas by diversifying economic activities such as:

- Agri-processing, tourism, and small-scale manufacturing.

- Eco-tourism and game farming in areas like Madikwe and Pilanesberg.
- Identify and earmark broad categories of land use, ensuring:
- High-value agricultural land is protected for food security and agrarian reform.
- Environmentally significant areas are safeguarded for conservation and ecosystem services.

Consolidate dispersed rural settlements by:

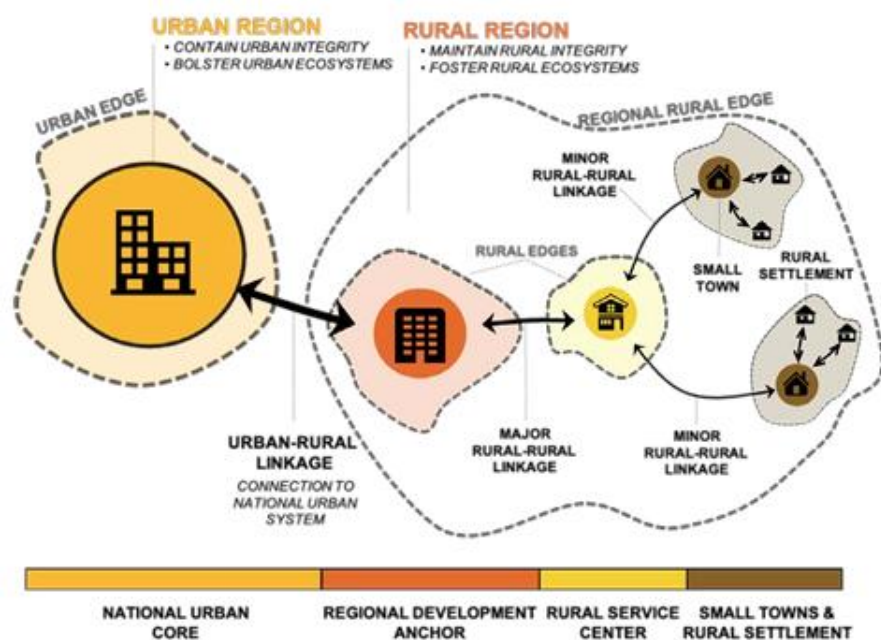
- Optimising infrastructure investment in strategically located rural nodes.
- Ensuring access to economic activities, transport, and community facilities in rural settlements such as Mogwase, Phokeng, Madikwe, Moretele, and Letlhakeng.

The figure 45 illustrates a hierarchical settlement structure and the linkages between urban and rural areas. It depicts a provincial urban core as the main city, which is connected to an urban-rural anchor, serving as a secondary town that links urban centres with rural areas. A small service centre provides essential services to surrounding rural settlements, which are located at the rural edges. Figure below highlights urban-rural development model, which facilitate economic and infrastructural connections between cities and rural areas, as well



as rural-rural linkages, which enable smaller settlements to access resources and services without needing to travel to major urban centres. This spatial framework underscores the importance of intermediary towns in ensuring balanced development and accessibility across different settlement types.

Figure 45: Urban – Rural Development Model



4.2.2.3.2 Supporting rural economic development

Economic development should focus on the development of the following sectors:

Mining and Mineral Beneficiation

BPDM is rich in mineral resources, particularly platinum, chrome, and granite (PGMs). The establishment of the Bojanala Special Economic Zone (SEZ) aims to harness these resources through mineral beneficiation, creating over 2,500 jobs and attracting investments estimated at R8 billion. This initiative is pivotal for socio-economic development and poverty alleviation in the district. Mining and mineral beneficiation in BPDM needs to be supported by:

- Improved road and rail networks to facilitate mineral transportation.
- Reliable water and electricity supply to sustain mining operations
- The SEZ should be fully developed and operationalised to enhance local beneficiation.
- Attracting investors to set up processing and manufacturing plants in the SEZ.
- Environmental Management and Sustainability which is ensuring compliance with environmental regulations to minimise negative impacts.



Tourism Development

Tourism development in BPDM needs to be supported by: The development of tourism routes and nodes.

- Establishing and enhancing tourism corridors connecting major attractions such as Sun City, Pilanesberg National Park, and the Magaliesberg.
- Proposed establishment of a National Botanical Garden in Rustenburg
- Developing township tourism routes that highlight cultural and historical sites

Focusing investment on cultural tourism and heritage and focusing on key attractions.

- Promoting and preserving cultural heritage sites, including traditional villages and historical landmarks.
- Expanding investment in heritage tourism to highlight sites such as the Cradle of Humankind.

The Green Economy.

- Encouraging eco-tourism initiatives that promote conservation and biodiversity.
- Supporting sustainable tourism projects such as solar-powered lodges and eco-friendly resorts

Mining.

- Encouraging responsible mining tourism, including heritage mine tours and geological tourism.

ICT Networks.

- Expanding digital infrastructure to improve online marketing, e-booking systems, and smart tourism solutions.
- Enhancing internet connectivity in rural tourism areas to support businesses and visitor experience

Renewable Energy

Exploring the Energy Sector:

- Energy is a critical input for most economic sectors.
- Focus on renewable energy as a key development area.

Benefits of Renewable Energy:

- Clean, unlimited, and cost-competitive.
- More diverse and abundant than fossil fuels.
- No greenhouse gas emissions, reducing climate change impact.
- No polluting emissions, making it environmentally friendly.

Agriculture and Agro-Processing

Agriculture in the BPDM needs to be supported by:

A Well-Defined and Maintained Roads Infrastructure



- Ensuring collaboration between the Bojanala Platinum District Municipality, SANRAL, Public Works & Roads and the North West Provincial Government for integrated road maintenance and development.
- Upgrading rural roads to enhance access to agricultural markets and transportation of produce.

The Development of Agri-Industries and Factories:

- Establishing agro-processing facilities near rural settlements and farms to create value-added agricultural products.
- Supporting local cooperatives and SMMEs in agro-processing to strengthen rural economies.

The Conservation of prime Agricultural Land

- Implementing land-use policies that prevent urban sprawl and mining activities from encroaching on prime agricultural land.
- Promoting sustainable land management practices to maintain soil fertility and agricultural productivity.

The Rehabilitation of Land Utilised by Mining

- Implementing post-mining land rehabilitation programs to restore soil quality and support agricultural use.
- Encouraging mining companies to invest in agricultural initiatives as part of their corporate social responsibility.

• Agri-Parks

According to the Department of Land Reform & Rural Development (DLRRD) (2016), an Agri-park is a networked innovation system of agro-production, processing, logistics, marketing, training and extension services, located in a District Municipality. As a network it enables a market-driven combination and integration of various agricultural activities and rural transformation services. The Agri-park comprises three distinct but interrelated basic components, namely:

- The Farmer Production Support Unit (FPSU) - a rural small-holder farmer outreach and capacity building unit that links farmers with markets. The FPSU does primary collection, some storage, provides some processing for the local market, and extension services including mechanisation,
- The Agri-hub (AH) - a production, equipment hires, processing, packaging, logistics, innovation and training unit, and
- The Rural Urban Market Centre (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.



- Provides market intelligence and information feedback, to the AH and FPSU, using latest Information and communication technologies.

The guiding principles for the establishment of agri-parks across South Africa are summarised as follows:

- One Agri-Park per District,
- Agri-parks must be farmer controlled,
- Agri-parks must be the catalyst around which rural industrialisation will take place,
- Agri-parks must be supported by government (10 years) to ensure economic sustainability,
- Strengthen partnership between government and private sector stakeholders to ensure increased access to services (water, energy, transport) and production on the one hand, while developing existing and create new markets to strengthen and expand value-chains on the other,
- Maximise benefit to existing state land with agricultural potential in the provinces, where possible,
- Maximise access to markets to all farmers, with a bias to emerging farmers and rural communities,
- Maximise the use of high value agricultural land (high production capability),

- Maximise use of existing agro-processing, bulk and logistics infrastructure,
- including having availability of water, energy and roads, and
- Support growing-towns and revitalisation of rural towns, in terms of high economic growth, high population growth over past 10 years and promote rural urban linkages. Three agri-parks have been identified for the North West Province which are Springbokpan, Moretele and Vryburg.

4.2.2.4 Enhancing connectivity (mobility and accessibility) Linking small towns, settlements, and villages with regional and sub-regional nodes of economic potential through:

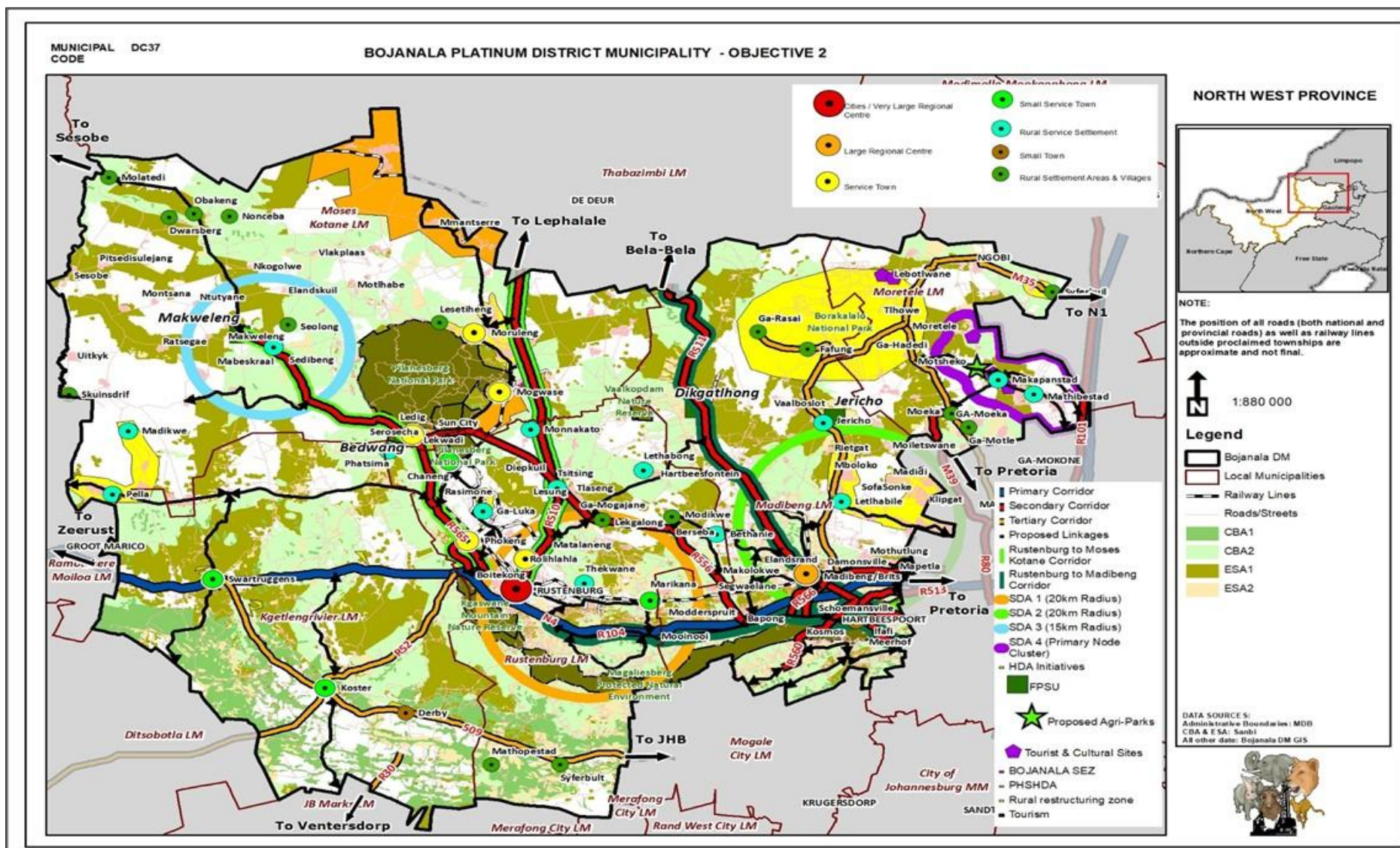
- **Efficient roads infrastructure**
 - Upgrading and maintaining road networks to improve connectivity between rural settlements and economic hubs such as Rustenburg & Brits.
- **Integrating transportation with urban areas.**
 - Expanding public transport options such as buses and minibus taxis to improve accessibility to economic centres.
 - Developing intermodal transport hubs to facilitate seamless movement between road and rail transport.



- **Enhancing mobility on link roads.**
 - Strengthening secondary and tertiary roads to ensure better access to remote villages and tourism destinations.
 - Prioritising road maintenance projects to improve safety and reduce travel time.
- **Reviving and enhancing rail networks by:**
 - Upgrading existing railway infrastructure to facilitate passenger and freight transport within the district.
 - Exploring the potential of commuter rail services to connect major settlements with economic hubs.
- **Upgrading railway lines linking key economic and tourism areas.**
 - Railway Improvement: Enhance rail links between Rustenburg, Brits, and mining areas for better goods and passenger transport.
 - Rail Corridor Development: Explore a rail connection between BPDM and neighbouring provinces to boost trade and tourism.



Map 43: Objective 2





4.2.3 Strategic Objective 3: Focus development efforts on regional spatial initiatives, including development corridors, zones, and nodes.

Spatial Development Strategy

Focussed development involving:

- Integration of regional and sub-regional spatial initiatives to maximise inter-provincial investments for greater regional impact.
- Support for Strategic Spatial Action Areas to drive coordinated regional development.
- Strengthening of development corridors, zones, and nodes to enhance economic and spatial growth.
- Integration of local road networks with main road systems to improve connectivity and accessibility.

4.2.3.1 Strategic Focus Areas:

4.2.3.1.1 Leveraging regional and sub regional development initiatives

- The Bojanala Platinum Development Corridor (N4)
- The Rustenburg Local Municipality Link (R104)
- The North West Integrated Transport Network (R556/N14)
- The Pilanesberg Tourism Development Route (R565)
- The Madibeng Accessibility Improvement Initiative (R511)

The following development objectives support regional co-operation:

- Increased sustainable economic growth in targeted sectors, which include:
- Improved agricultural productivity.
- Increased trade.
- Increased intermunicipal tourism
 - Improved management of intermunicipal resources.
 - Effective support for international agreements and programs.

The following regional spatial initiative development objectives need to be achieved:

- Development of the Platinum Development Corridor
 - Supported by the N4 highway, serving as a key regional development corridor.
 - Leverages the district's strategic location to enhance economic activities.
 - Enhances connectivity by improving transport and logistics networks.
 - Stimulates growth along transportation corridors to drive regional development.
- Rural Nodal Development Along Mobility Corridors
 - Prioritise rural development along major roads and mobility corridors.



- Enhance infrastructure and services in rural areas to support growth.
- Create vibrant rural economies by strengthening key economic activities.
- Improve access to markets to boost trade and livelihoods.

- Brits:

- Located along the N4 highway.
- Significant town with potential for economic growth.
- Strong agricultural base.
- Opportunities for growth in manufacturing.

- Rustenburg:

- Not a small town but has surrounding areas and smaller settlements i.e. Phokeng, Marikana etc.
- Potential for revitalisation of these smaller settlements.
- Location along the N4 presents development opportunities.

R512 and R104

Magaliesburg: This town is a popular tourist destination due to its proximity to the Magaliesberg Mountains and could benefit from infrastructure improvements to enhance tourism.

Hartbeespoort: Known for its scenic beauty and tourist attractions, revitalising Hartbeespoort could boost local businesses and tourism

R565 and R566 Roads:

Sun City and Pilanesberg Area: While not a traditional small town, the area around Sun City and Pilanesberg Game Reserve could see revitalisation efforts to support tourism infrastructure and local industries.

R510 Road:

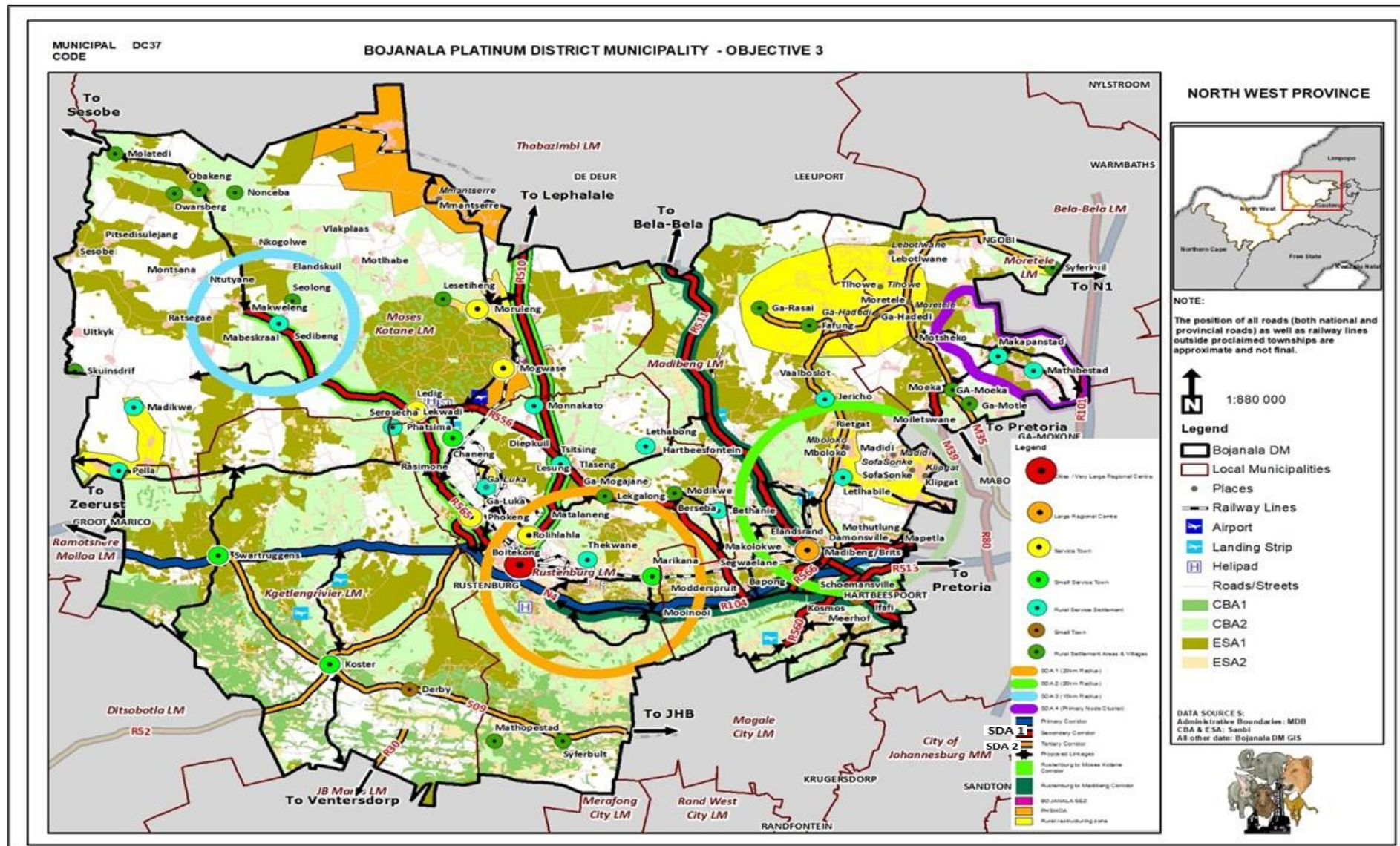
Mogwase: This area is close to major mining operations and could be revitalised to support local economic development.

- Integration with Regional Activity Nodes

The district aims to integrate its development initiatives with regional activity nodes located within transportation corridors. This ensures that economic activities are well-connected and supported by adequate infrastructure.



Map 44: Objective 3





4.2.3.2 Supporting Regional Strategic Spatial (and Implementation) Action Areas.

In terms of the National Spatial Development Framework, the BPDM is affected by an urgent short-term, strategic spatial development Catalysts 23 in the form of a Strategic Spatial (and Implementation) Action Area, involving a National Resource risk area to:

- Focus Areas:
 - Rural development.
 - Infrastructure delivery.
 - Diversifying the local economy through:
 - Mining.
 - Tourism.
 - Local businesses.
- Alignment with National Plans:
 - The Integrated Development Plan (IDP) reflects these priorities.
 - The IDP aligns with national strategic plans like the National Development Plan (NDP).

Impacts on Bojanala Platinum District Municipality

Given the NSDF's emphasis on addressing national resource risks and promoting sustainable development, the BPDM would likely be impacted by initiatives aimed at:

- Rural Development: Enhancing rural economies and connectivity to urban centres.
- Resource Management: Protecting and managing natural resources effectively to support local economic activities.
- Infrastructure Development: Investing in strategic infrastructure to support economic growth and social equity.

4.2.3.3 Strengthening of development corridors, zones and nodes

The Bojanala District Municipality can strengthen its development corridors, zones, and nodes through targeted long-term development objectives that align with broader regional initiatives. Below are the proposed objectives tailored for Bojanala:

- Enhancing the Role and Function of Transportation Corridors and Links in Bojanala:
 - N4 Platinum Corridor:
 - Leverage the N4 highway as a major freight route.
 - Focus on industries in the Rustenburg and Brits areas.
 - Ensure efficient transport of goods to and from neighbouring provinces.
 - R104 Secondary Corridor:
 - Improve rail services along the R104.
 - Serve as a critical link for transporting agricultural produce from surrounding rural areas to markets.



Utilising Existing Road Infrastructure:

- R556 Corridor:
 - Strengthen the R556, connecting Rustenburg with the N4.
 - Improve access to key economic zones.
 - Enhance connectivity for local businesses.
- R104 Corridor:
 - Optimise the R104, connecting to the N1.
 - Serve as a vital link for inter-regional trade.
 - Target sections that service the mining and agricultural sectors.
- R513 Route:
 - Focus on improving the R513 that runs through the district.
 - Promote better access to economic hubs.
 - Boost local commerce.

4.2.4 Strategic Objective 4: Promote sustainable urban development.

4.2.4.1 Strategic Focus Areas for Sustainable Urban Development

4.2.4.1.1 The Development of Sustainable Cities and Towns

Urban areas within BPDM must prioritise the following elements to effectively manage urbanisation:

Accommodating Urbanisation Trends:

- Focus on accommodating influx of people into urban areas, especially in Large Regional Service Centres and Regional Service Centres.

A balanced settlement pattern is necessary, considering:

- Population Distribution: Urban planning must reflect demographic changes and population growth to prevent overcrowding and resource strain.
- Resource Availability: Special attention to water availability, with Hartbeespoort and Buffelspoort dams needing sustainable management for urban growth support.
- Economic Potential: The district has diverse economic sectors:
 - Mining (dominant in Rustenburg and Madibeng LM).
 - Agriculture (dominant in Moretele, Kgetlengrivier, and Madibeng LM).
 - Tourism (dominant in Moses Kotane, Rustenburg, and Madibeng LM).
- Economic strategies should leverage these sectors for growth while promoting sustainability.



Within urban areas the following spatial guidelines need to apply:

- **Integrated Urban Planning and Management through:**
 - Aligning urban planning with national and provincial policies, ensuring that local plans are actionable and context-specific.
 - Incorporate resilience into spatial planning to mitigate climate change impacts, as highlighted in the district's Climate Change Adaptation Plan.
 - Strengthening the capacity to implement the Spatial Planning and Land Use Management Act (SPLUMA).
- **Integrated Transport and Mobility through the following policy priorities:**
 - Develop urban linkages that connect urban centres and rural structuring zones with surrounding areas, making urban centres and towns more accessible
 - Promote pedestrian-friendly environments to enhance mobility within urban areas.
 - Empowering cities as per the National Land Transport Act, Act 5 of 2009, (NLTA).

- **Integrated sustainable human settlements through the following policy priorities**
 - Focus on upgrading informal settlements and regenerating inner cities to combat urban decay.
 - Encourage densification strategies that optimise land use while providing affordable housing options. (Rustenburg and Brits)
 - Identify and fast track land for settlement interventions.
 - Applying urban design principles and transform public spaces into safe places of community life
- **Integrated urban infrastructure through the following policy priorities**
 - Institutionalise long-term infrastructure planning that addresses both current needs and future growth.
 - Invest in ICT infrastructure to support economic development and improve service delivery.
 - Develop infrastructure as a bridge between rural and urban areas.



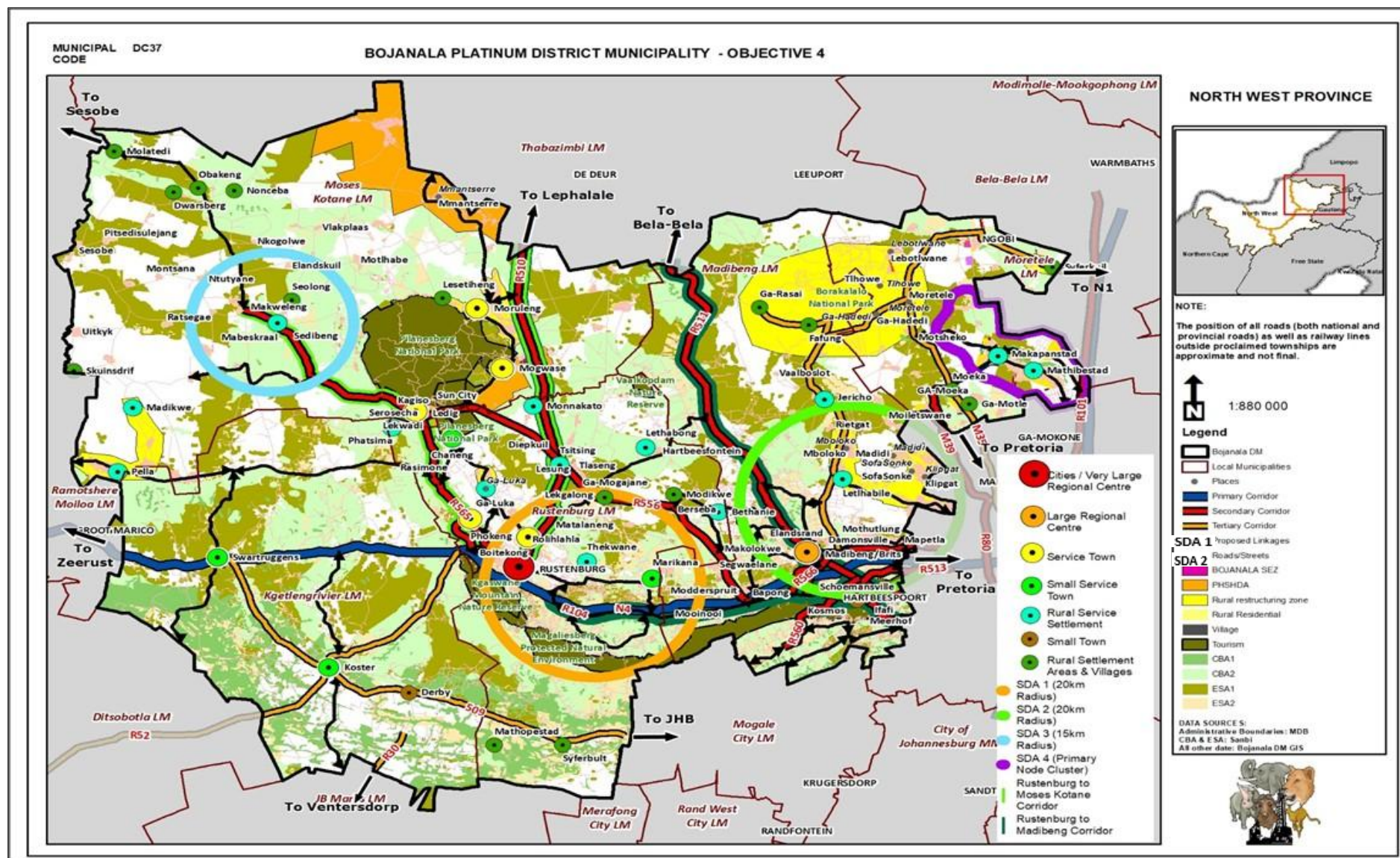
- **Efficient land governance and management through the following policy priorities:**
 - Strengthen land-use planning frameworks to prevent fragmentation and ensure equitable access to land for all community members.
 - Promote land tenure security initiatives to empower residents, particularly marginalised groups.
- **Inclusive economic development through the following policy priorities**
 - Enhance the role of municipalities in driving local economic development by supporting small businesses and entrepreneurship.
 - Foster partnerships with traditional leadership structures (e.g., Royal Bafokeng) to leverage local knowledge and resources for sustainable development initiatives.
 - Improve access to quality public infrastructure and facilities.
 - Encouraging active community participation in local economic development.

4.4.2.2 Priority Human Settlements and Housing Development Areas.

The priority human settlement areas in BPDM need to strengthen the major development nodes. These areas are crucial for enhancing economic growth, improving living conditions, and providing essential services to residents. These nodes are strategically located along major corridors such as the N4 Platinum Corridor, which provides connectivity and economic opportunities. There are 7 Priority Human Settlements and Housing Development Areas (PHSHDAs) that have been identified within the BPDM spanning Madibeng, Moses Kotane and Rustenburg Local municipalities. These areas have been identified as key zones for accelerated human settlement development, particularly in response to the district's high levels of informal settlements and the need for spatial transformation. These areas are designated under the national Housing Act and are intended to direct coordinated public investment, including infrastructure, land acquisition, and housing delivery, towards locations where the need for integrated human settlements is most urgent.



Map 45: Objective 4





4.5 IMPLEMENTATION FRAMEWORK

The Spatial Planning and Land Use Management Act 16 of 2013, in Section 12, determines that spatial development frameworks must assist in integrating, coordinating, aligning and expressing development policies and plans emanating from the various sectors of the spheres of government as they apply within the municipal area. It must also outline specific arrangements for prioritising, mobilising, sequencing and implementing public and private infrastructural and land development investment in the priority spatial structuring areas identified in spatial development frameworks.

The Implementation Framework forms a critical component of the BPDMSDF, serving as the bridge between strategic spatial planning and tangible development outcomes. While the BPDMSDF articulates the long-term spatial vision and developmental priorities for the municipality, the Implementation Framework ensures that these objectives are translated into coordinated actions, programs, and investments that are aligned with municipal capabilities and resources. To ensure that they will support and strengthen the future spatial, settlement and development pattern within the BPDM and its local municipalities.

4.5.1 BPDM IMPLEMENTATION FRAMEWORK

The BPDM Implementation Framework must support a spatial development framework that will align, integrate and coordinate all relevant sector policies and plans. It must target specific areas for the implementation of programmes, projects and actions. BPDMSDF needs to focus on the alignment, integration and coordination of the national, provincial and local municipal policies and plans including the NSDF (2022), the NWSDF (2016) and local municipalities SDF as well as sector plans and policies that require spatial integration and coordination in the urban and rural planning space.

The following Spatial Development Implementation Focus Areas are provided to align, integrate and coordinate all relevant sector policies and plans and target specific areas for the implementation of programmes, projects and actions:

- Protection of biodiversity, water resources and agricultural land
- Foster sustainable rural development
- Focus development efforts on regional spatial initiatives, including development corridors, zones and nodes.
- Promote sustainable urban development.



These focus areas will assist in concentrating investments providing coordination for public as well as private investments.

Table 44: BPDM IMPLEMENTATION FRAMEWORK

IMPLEMENTATION FOCUS	POLICY ALIGNMENT	TARGET PROGRAMME/PROJECT/ ACTION	RESPONSIBILITY,	ESTIMATED COSTS	FUNDING SOURCE	TIMELINES		
						SHORT	MED	LONG
Protection of biodiversity, water resources and agricultural land.	NW Biodiversity Sector Plan 2015	Bojanala Livestock (Food Security & Agrarian Reform - CASP (Comprehensive Agricultural Support Programme))	BPDM	R2 000 000,00	CASP		x	
	National Biodiversity Strategy and Action Plan (NBSAP) 2015-2025	Review the Bojanala Platinum District Municipality Environmental Management Framework	BPDM, DARD	R1,500,000	DFFE	x		
		Protect and rehabilitate water catchments (especially in Hartbeespoort, Magaliesberg, Elandsrivier)	BPDM, DWS	R18,000,000	WSIG	x	x	x
Foster sustainable rural development	NSDF 2022	Develop and implement a District Roads Master Plan (inclusive of Rural-Urban Linkage Strategy to guide the physical, economic, and service integration between rural settlements and urban centres such as Rustenburg and Brits)	BPDM	R5,000,000	MIG	x		
	RDP (Comprehensive Rural Development Programme)	Accelerate delivery of basic infrastructure in rural areas, including piped water, electricity, ICT, and sanitation.	BPDM, Local Municipalities	R150,000,000	MIG, WSIG, INEP, RIBG	x	x	
	NDP 2030	Implement Agri-Hub in Moretele	DLRRD, MLM, BPDM	R20,000,000	Agri-Parks Programme	x		
	National Upgrading Support Programme (NUSP)	Formalisation and in-situ upgrading of informal settlements plan	COGHSTA, DHS, Local Municipalities	R2 000 000,00	ISUPG	x	x	x
	SPLUMA 2013	Implement the Bojanala Special Economic Zone (SEZ)	DTIC, NWDC	R100 000 000,00	DTIC SEZ Programme	x	x	x



IMPLEMENTATION FOCUS	POLICY ALIGNMENT	TARGET PROGRAMME/PROJECT/ ACTION	RESPONSIBILITY,	ESTIMATED COSTS	FUNDING SOURCE	TIMELINES		
						SHORT	MED	LONG
	National Rail Policy White Paper (2022).	Develop Precinct Plans for the Identified SDAs	BPDM, Local Municipalities	R8 000 000,00	BPDM/HDA	x	x	
		Promote the establishment of solar farms and renewable energy cooperatives in rural areas with suitable land.	PPP, DMRE, Local Municipalities, ESKOM	R80 000 000,00	REIPPP, DMRE, Green Fund, PPP		x	
		Support eco-tourism and cultural tourism initiatives	DEDECT, BPDM, Local Municipalities	R10 000 000,00	DEDECT, National Dept of Tourism, BPDM	x	x	x
Focus development efforts on regional spatial initiatives, including development corridors, zones and nodes.	NW PSDF 2016 NSDF 2022 Integrated Urban Development Framework (IUDF) 2020–2025	Upgrade and maintain the N4 highway as a freight and logistics backbone.	SANRAL	R200 000 000,00	SANRAL	x	x	
		Develop and implement a District Roads Master Plan	BPDM	R5 000 000,00	BPDM	x		
		Rehabilitate and expand freight rail services, particularly between Rustenburg, Brits, and mining/tourism nodes.	Transnet	R400 000 000,00	Transnet Capital Programme, PPP	x	x	x
		Develop Thusong centres in areas needing socio-economic development (Such as in Makapanstad in MLM)	National Treasury, BPDM, Local Municipalities	R15 000 000,00	MIG		x	
		Upgrade all major routes (i.e R104, R510, R556 etc) to improve intra- and inter-district linkages.	SANRAL, BPDM	R300 000 000,00	SANRAL, MIG	x	x	x
		Develop a programme to formalise informal settlements and less formal townships	BPDM, DHS	R2 000 000,00	ISUPG			
		Conduct feasibility studies for Integrated Public Transport Networks (IPTNs)	Local Municipalities, DoT	R2 000 000,00	DoT (IPTN Planning Grant)		x	
	NSDF 2022	Promote compact development in major development areas. (policy and planning phases)	Local Municipalities	R3 000 000,00	BPDM	x	x	x



IMPLEMENTATION FOCUS	POLICY ALIGNMENT	TARGET PROGRAMME/PROJECT/ ACTION	RESPONSIBILITY,	ESTIMATED COSTS	FUNDING SOURCE	TIMELINES		
						SHORT	MED	LONG
Promote sustainable urban development.	Integrated Urban Development Framework (IUDF) 2020–2025	Implement urban water sustainability strategies, including the protection and integrated management of dams within BPDM.	BPDM, Magalies Water	R10 000 000,00	WSIG, Magalies Water, DBSA	x	x	
		Develop a district-wide ICT master plan	BPDM, Local Municipalities, DCDT	R5 000 000,00	DCDT		x	
		Investigate and formalise landfill operations district-wide	BPDM, Local Municipalities	R10 000 000,00	MIG	x	x	
		Prepare Precinct Plans and regeneration of CBDs to address urban decay and improve living conditions.	BPDM, Local Municipalities	R100 000 000,00	BPDM, DHS	x		
		Identify and address infrastructure backlogs (Economic infrastructure, Housing)	DHS, BPDM, Local Municipalities	R500 000 000,00	MIG, RBIG, WSIG, HSDG	x		
		Identify and support strategic urban economic zones for industrial, tourism, and agricultural activities	BPDM, Local Municipalities	R10 000 000,00	BPDM		x	
		Promote non-motorised transport infrastructure (sidewalks, cycle lanes) to create pedestrian-friendly environment especially in major urban centres like Rustenburg and Brits.	BPDM, Local Municipalities	R30 000 000,00	MIG	x	x	



4.5.2 LOCAL MUNICIPALITIES

4.5.2.1 RUSTENBURG LOCAL MUNICIPALITY

Major settlements identified within the Rustenburg Local Municipality include the following:

Cities and Large Regional Centres: Rustenburg

Service Towns: Phokeng and Boitekong

Small Service Towns: Marikana and Chaneng

Rural Service Settlement: Bethanie, Monnakato, Tsitsing, Thekhwane, Ga-Luka, Lethabong, Phatsima.

Rural Settlement Areas & Villages: Modikwe, Lekgalong, Mathopestad, Syferbult.

Rustenburg displays a mixed urban-rural character, with a strong urban core supported by a network of secondary and mining-related settlements. The municipality benefits from a strategic location along the N4 Platinum Corridor, and its economy is deeply embedded in the mining and industrial sectors, with strong links to Gauteng and international export markets.

PROPOSED DEVELOPMENT OBJECTIVES

- Prioritise Infill Development and Densification within the strategic points and strategic routes.



- Identify strategic areas to promote Greenfield development in proximity to services to accommodate population or economic growth.
- Identify and upgrade informal settlements within the municipality
- Invest in the upgrading and maintenance of ageing bulk infrastructure (water, sanitation, electricity, stormwater), particularly in high-growth and underserved areas.
- Exploit Rustenburg's strategic location along the N4 Platinum Corridor and its role as a mining hub to attract logistics, industrial and commercial investments.
- Promote agro-processing industries in surrounding rural areas to diversify the economy beyond mining and create regional value chains.
- Formalise informal trade by providing demarcated trading zones, infrastructure and support services in key urban areas.
- Safeguard and sustainably utilise fertile agricultural areas
- Develop mixed-income housing within the Rustenburg urban development edge, close to jobs and services, to support inclusion and limit the growth of informal settlements.
- Protect water catchment areas such as Dams, Rivers, wetlands, and biodiversity corridors from encroachment and pollution.



Table 45: Rustenburg Local Municipality

NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
Rustenburg Local Municipality	Municipal wide	<ul style="list-style-type: none"> Develop a strategy and policy that provide guidelines for settlements on agricultural land outside of the urban edge to accommodate rural agricultural and/or other resource-related communities. 	R400 000,00	CASP
		<ul style="list-style-type: none"> Develop a system/s for the integration of the municipal GIS and the Land Use Scheme 	R1 000 000,00	RLM
		<ul style="list-style-type: none"> Develop a Road Master Plan for the municipal area. 	R4 000 000,00	RLM
		<ul style="list-style-type: none"> Development of a University 	R1 000 000 000,00	RLM, Dept of Higher Education, BPDM
		<ul style="list-style-type: none"> Develop a feasibility study and business plan for the planned tertiary educational facility, including a land use development framework for the educational precinct area to pro-actively plan for student accommodation and ancillary uses. 	R3 000 000,00	RLM
		<ul style="list-style-type: none"> Develop a programme to formalise informal settlements and less formal townships 	R2 000 000,00	Department of Human Settlements/ NW COGTA/HDA/RLM
		<ul style="list-style-type: none"> Finalise the feasibility study for the locality and size of a Regional Cemetery 	R1 500 000,00	RLM
		<ul style="list-style-type: none"> Develop an ICT master plan. 	R3 000 000,00	RLM
		<ul style="list-style-type: none"> Develop an Integrated Public Transport Plan 	R3 500 000,00	DoT, KRLM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
		<ul style="list-style-type: none"> Review of the Housing Sector Plan 	R1 000 000,00	RLM/DHS
		<ul style="list-style-type: none"> Review of the Rustenburg Local Municipality Land Use Scheme, 2021 to accommodate increased densities that compare with national trends; and include a use zone for the proposed Protected Agricultural Areas 	R1 500 000,00	RLM
	Rustenburg	<ul style="list-style-type: none"> Upgrading of Rustenburg WWTW from 42 MI to 90 MI, Assessment of 8 sewer pump stations, construction of 1 New Sewer pump station, Extension and upgrade of sewer drainage network 	R844 223 487,00	MIG
		<ul style="list-style-type: none"> Additional reservoir storage in the Rustenburg bulk system 	R57 024 380,00,	WSIG
		<ul style="list-style-type: none"> Review of the Rustenburg North and East End Precinct Plan 	R1 500 000,00	RLM
		<ul style="list-style-type: none"> Review of the Rustenburg City Development Strategy (CDS), 2006 	R2 500 000,00	RLM
		<ul style="list-style-type: none"> Develop a CBD Urban Restructuring and Renewal Strategy 	R1 500 000,00	DCoG/RLM
		<ul style="list-style-type: none"> AC pipe replacement in Rustenburg Industrial area 	R65 000 000,00	WSIG
	Phokeng	<ul style="list-style-type: none"> Develop Water and Sanitation sector plans for the WSA 	R500 000,00	RLM
		<ul style="list-style-type: none"> Bulk water and sanitation upgrades 	R80 000 000,00	MIG, WSIG
		<ul style="list-style-type: none"> Development of a precinct plan 	R2 000 000,00	DLRRD, KRLM
		<ul style="list-style-type: none"> Roads and stormwater upgrading 	R40 000 000,00	MIG
		<ul style="list-style-type: none"> Undertake smart readiness assessment for the Urban Development Zone 	R1 500 000,00	RLM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
RLM3	Boitekong	• Boitekong Upgrading of Sewer Network	R40 000 000,00	MIG
		• Formalising/Upgrading of informal settlements in Boitekong area	R3 500 000,00	ISUPG
		• Upgrading of Boitekong WWTW from 24 MI to 35 MI, construction of 4 New Sewer pump stations, Extension and upgrade of sewer drainage network Functionality,	R608 077 600,00	MIG
		• Development of a precinct plan	R2 000 000,00	DLRRD, KRLM
		• AC bulk water pipeline replacement for Boitekong	R60 000 000,00	MIG
RLM6	Marikana	• Marikana Waster Transfer Station Construction	R16 000 000,00	Waste Management Programme, MIG, BPDM
		• Facilitate the development of a cross-border Local Area/Precinct Plan for the Marikana Node	R2 000 000,00	NW COGHSTA; BPDM
		• Construction of additional Marikana 19 MI reservoir storage	R37 425 640,00	WSIG
RLM5	Chaneng	• Roads and Stormwater Upgrading	R16 000 000,00	MIG
		• Bulk water supply and sanitation upgrading	R30 000 000,00	WSIG
RLM6	Bethanie	• Construction of Bethanie WWTW of 1,3 MI and drainage network,	R37 702 300,00	MIG





NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
		<ul style="list-style-type: none"> Bethanie reservoir relocation, Pump station relocation and Network reinforcements, Phase 2 of Kortbegrip projects, 	R40 597 060,00	RBIG
RLM7	Ga-Luka	<ul style="list-style-type: none"> Engineering Services Upgrading 	R40 000 000,00	MIG
RLM8	Tsitsing	<ul style="list-style-type: none"> Engineering Services Upgrading 	R40 000 000,00	MIG
RLM9	Phatsima	<ul style="list-style-type: none"> Replacement of Bulk and water storages and reticulation Pipeline in Phatsima 	R47 500 000,00	WSIG
		<ul style="list-style-type: none"> Review of the Precinct Plan 	R2 000 000,00	DLRRD/RLM
		<ul style="list-style-type: none"> Roads and Stormwater upgrade 	R30 000 000,00	MIG
		<ul style="list-style-type: none"> Construction of an additional 8 MI Reservoir and flow control valve on the inlet to the Phatsima reservoir 	R22 625 960,00	MIG
RLM10	Monnakato	<ul style="list-style-type: none"> Construct additional Monnakato (8200kl) reservoir 	R18 696 580,00	WSIG.
		<ul style="list-style-type: none"> Construct Monnakato (950kl) tower 	R14 951 580,00	WSIG



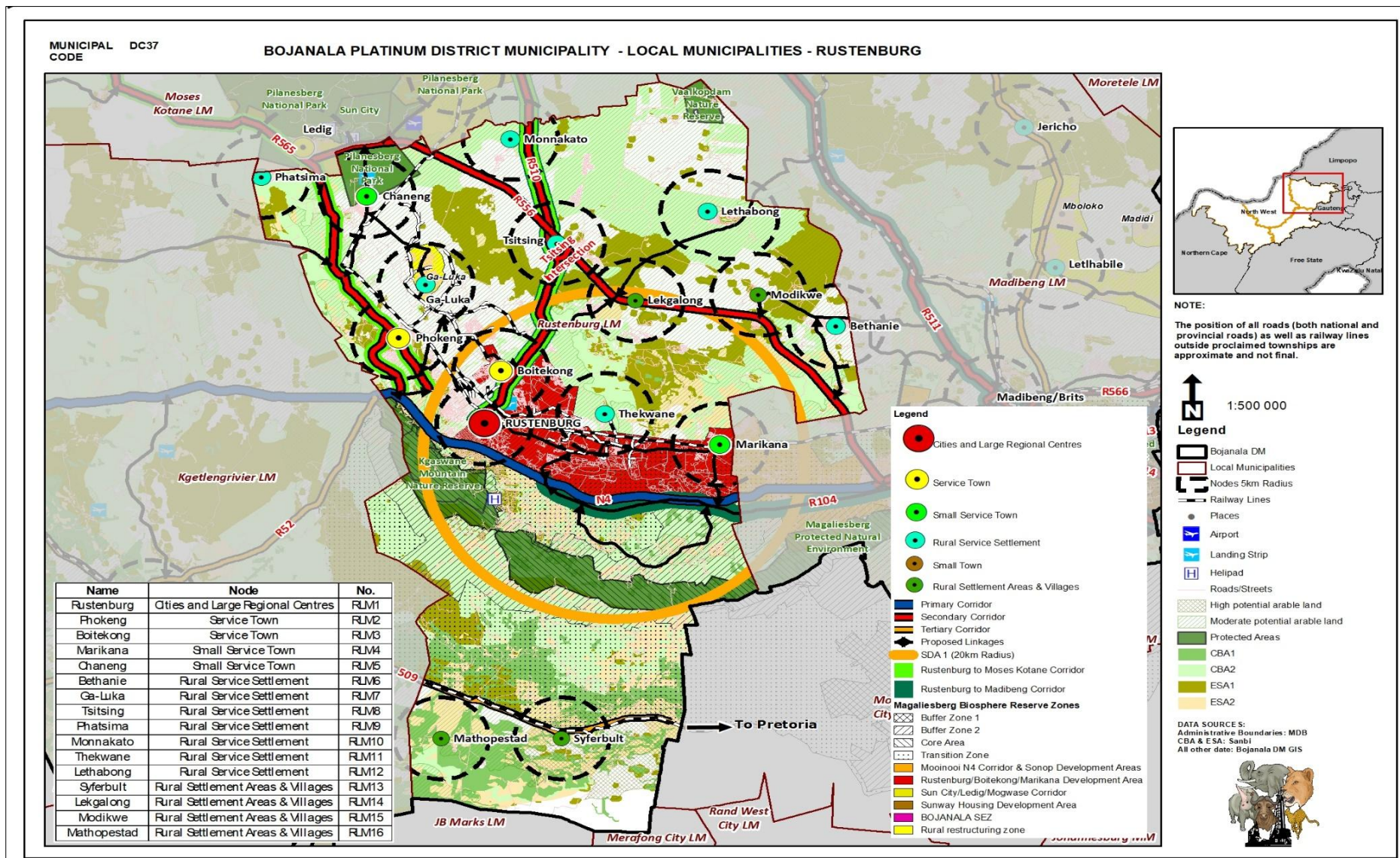
NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
		<ul style="list-style-type: none"> Review of the Precinct Plan 	R2 000 000,00	DLRRD/RLM
RLM11	Thekwane	<ul style="list-style-type: none"> Roads and Stormwater upgrade 	R35 000 000,00	MIG
RLM12	Lethabong	<ul style="list-style-type: none"> Lethabong Internal Sewer Reticulation, Toilet Structures and Upgrading of WWTW 	R100 000 000,00	MIG
		<ul style="list-style-type: none"> Review of the Precinct Plan 	R2 000 000,00	DLRRD/RLM
		<ul style="list-style-type: none"> Construct additional 10,5Ml Lethabong Lower reservoir 	R19 835 620,00	MIG
RLM13	Syferbult	<ul style="list-style-type: none"> Develop a Precinct Plan for Syferbult 	R2 000 000,00	DLRRD/RLM
RLM14	Lekgalong	<ul style="list-style-type: none"> Engineering Services Upgrading 	R40 000 000,00	MIG
RLM15	Modikwe	<ul style="list-style-type: none"> Develop a Precinct Plan 	R2 000 000,00	DLRRDD/RLM
RLM16	Mathopestad	<ul style="list-style-type: none"> Develop a Precinct Plan 	R2 000 000,00	DLRRD/RLM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
 	Provincial Links	<ul style="list-style-type: none">Upgrading and Maintenance of Provincial Roads	-	NW Dept of Roads & Transport, SANRAL
	District Links	<ul style="list-style-type: none">Upgrading and Maintenance of District Roads	-	MIG, RLM



Map 46: Rustenburg Local Municipality





4.5.2.2 MOSES KOTANE LOCAL MUNICIPALITY

Major settlements identified within the Moses Kotane Local Municipality include the following:

Service Town: Mogwase, Ledig and Moruleng.

Rural Service Settlement: Mabeskraal, Pella and Madikwe.

Rural Settlement Areas & Villages: Skuinsdrif, Seolong, Obakeng, Molatedi, Lesetlheng, Nonceba and Dwarsberg.

Moses Kotane Local Municipality exhibits a predominantly rural character interspersed with emerging urban nodes. Its strategic location within the Pilanesberg tourism and mining belt, coupled with proximity to the N4 Platinum Corridor and R510, positions it advantageously for economic development. The local economy is primarily driven by tourism, mining, and agriculture, with Sun City and Pilanesberg National Park serving as significant tourist attractions.

PROPOSED DEVELOPMENT OBJECTIVES

- Leverage the municipality's strategic location and existing tourism infrastructure to attract logistics, industrial, and commercial investments
- Protect water catchment areas such as dams, rivers, wetlands, and protected areas from encroachment and pollution.
- Improve integration between major nodes such as Mogwase, with the villages, and tourism hubs through upgraded transportation networks and land use planning.
- Promote the upgrading and maintenance of ageing bulk infrastructure
- Promote the investments and diversification of the economy beyond mining and tourism, such as the introduction of agro-processing industries in the surrounding rural areas



Table 46: Moses Kotane Local Municipality

NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
Moses Kotane Local Municipality	Municipal wide	<ul style="list-style-type: none"> Energising of High Mast lights and Community Halls in various villages. 	R7 000 000,00	MIG
		<ul style="list-style-type: none"> Establish an integrated Geographic Information System (GIS) system. 	R3 000 000,00	MKLM
		<ul style="list-style-type: none"> Land Audit for the municipality 	R2 000 000,00	DLRRD, MKLM
		<ul style="list-style-type: none"> Development of the Housing Sector Plan 	R1 000 000,00	MKLM/DHS
		<ul style="list-style-type: none"> Develop a municipal ICT master plan 	R2 500 000,00	BPDM, MKLM
MKM1	Mogwase	<ul style="list-style-type: none"> Refurbishment of Mogwase Waste Water Treatment Plant 	R16 000 000,00	WSIG
		<ul style="list-style-type: none"> Mogwase WWTW plant security upgrade, N Sanitation 	R5 000 000,00	WSIG
		<ul style="list-style-type: none"> Design Rehabilitation of Mogwase internal roads 	R21 000 000,00	MIG
		<ul style="list-style-type: none"> Water Conservation and Demand Management in Mogwase 	R2 000 000,00	WSIG
		<ul style="list-style-type: none"> Implementation of the Mogwase SEZ 	R100 000 000,00	BPDM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
		<ul style="list-style-type: none"> Development of a precinct plan 	R2 000 000,00	DLRRD/MKLM
MKM2	Moruleng	<ul style="list-style-type: none"> Bulk water and sanitation upgrades 	R40 000 000,00	WSIG
		<ul style="list-style-type: none"> Development of a Precinct Plan 	R2 000 000,00	MKLM/DLRRD
MKM3	Ledig	<ul style="list-style-type: none"> Construction of Ledig Water Supply, Various Sections 	R9 804 021,00	MIG
		<ul style="list-style-type: none"> Informal Settlement Upgrading 	R11 740 000,00	MKM/HDA/NWDHS
		<ul style="list-style-type: none"> Development of a Precinct Plan 	R2 000 000,00	MKLM/DLRRD
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R45 000 000,00	MIG
MKM4	Mabeskraal	<ul style="list-style-type: none"> Mabeskraal to Uitkyk Bulk Water Pipeline Phase II 	R7 000 000,00	WSIG
		<ul style="list-style-type: none"> Refurbishment of Mabeskraal boreholes 	R3 000 000,00	MIG
		<ul style="list-style-type: none"> Mabeskraal internal roads and stormwater 	R16 000 000,00	MIG
		<ul style="list-style-type: none"> Mabeskraal Sports Facility 	R1 000 000,00	MIG



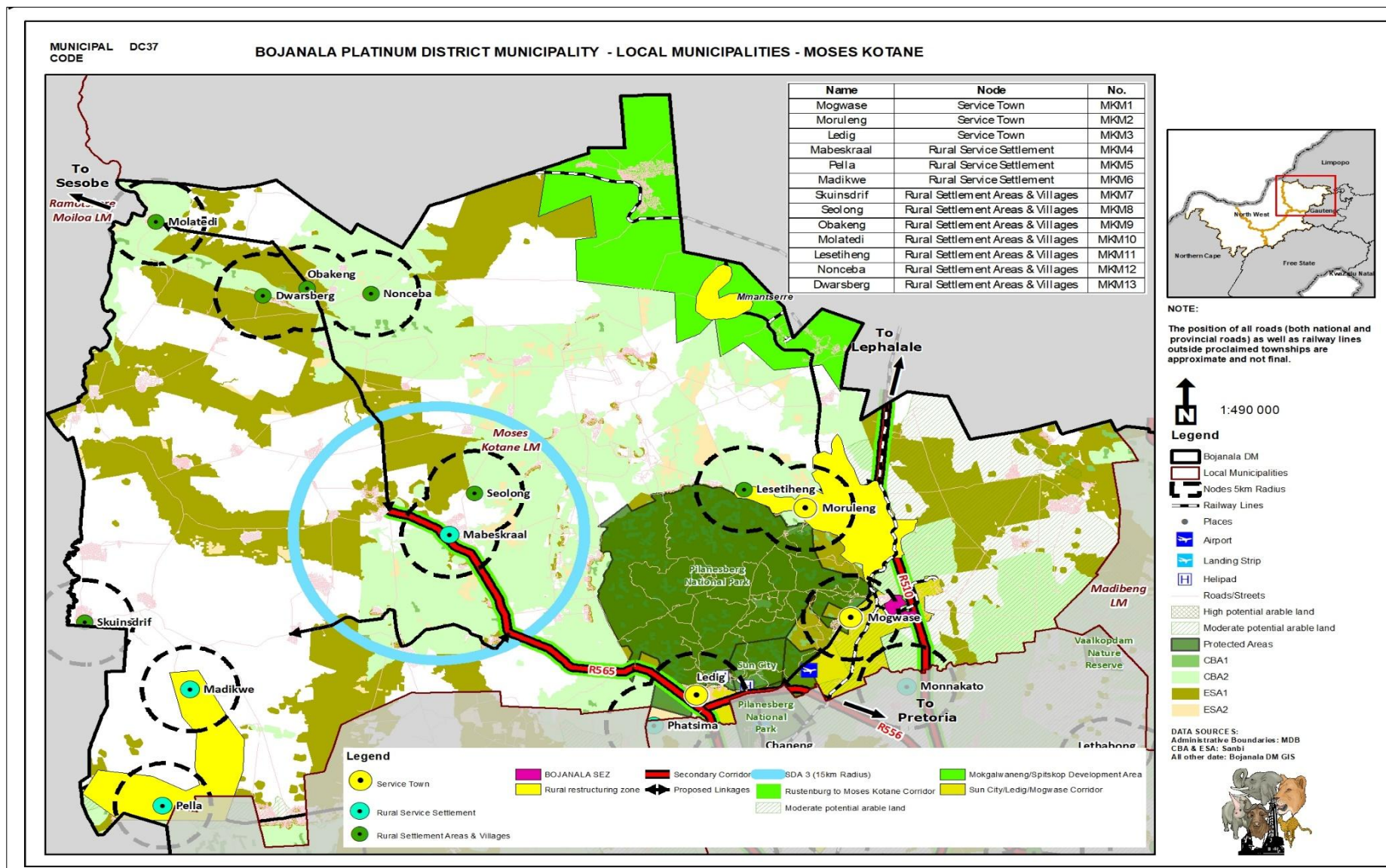
NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
MKM5	Pella	<ul style="list-style-type: none"> Informal Settlement Upgrading 	R5 043 000,00	MKLM/HDA/NWDHS
		<ul style="list-style-type: none"> Engineering Services Upgrading 	R40 000 000,00	MKLM
MKM6	Madikwe	<ul style="list-style-type: none"> Upgrading of Madikwe Sewer Network 	R15 000 000,00	WSIG
		<ul style="list-style-type: none"> Madikwe sewer pump stations upgrade (7) 	R 7 500 000,00	WSIG
		<ul style="list-style-type: none"> Madikwe oxidation ponds lining, Sanitation 	R20 000 000,00	MIG
		<ul style="list-style-type: none"> Madikwe: Replacement of 30km AC bulk pipeline (350mm) and internal reticulation AC pipes, 	R90 000 000,00	MIG
		<ul style="list-style-type: none"> Madikwe: Construction of additional storage for the scheme 	R15 000 000,00	WSIG
		<ul style="list-style-type: none"> Upgrading of Madikwe Landfill Site (Design) 	R5 000 000,00	MKLM, BPDM
		<ul style="list-style-type: none"> Refurbishment of 3 boreholes in Madikwe, 	R2 250 000,00	MIG
MKM7	Skuinsdrif	<ul style="list-style-type: none"> Engineering Services Upgrading 	R20 000 000,00	MIG
MKM8	Seolong	<ul style="list-style-type: none"> Engineering Services Upgrading 	R20 000 000,00	MIG



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COSTS	FUNDING SOURCE
MKM9	Obakeng	<ul style="list-style-type: none"> Engineering Services Upgrading 	R25 000 000,00	MIG
MKM10	Molatedi	<ul style="list-style-type: none"> Upgrading Water Treatment plant in Molatedi – (Molatedi Groundwater source developed) 	R10 000 000,00	MIG
		<ul style="list-style-type: none"> Development of Molatedi Dam as a Bulk Water Scheme 	R1 500 000 000,00	
MKM11	Lesetlheng	<ul style="list-style-type: none"> Engineering Services Upgrading 	R20 000 000,00	MIG
MKM12	Nonceba	<ul style="list-style-type: none"> Upgrading of Stormwater Management Nonceba 	R10 000 000,00	MIG
MKM13	Dwarsberg	<ul style="list-style-type: none"> Engineering Services Upgrading 	R20 000 000,00	MIG
—	District Links	Upgrading and Maintenance of District Roads		MIG, MKLM



Map 47: Moses Kotane Local Municipality





4.5.2.3 MORETELE LOCAL MUNICIPALITY

Major settlements identified within the BPDM settlement hierarchy include the following:

Rural Service Settlement: Makapanstad and Mathibestad.

Rural Settlement Areas & Villages: Ga-Motle, Moeka and Syferkuil

Moretele Local Municipality is predominantly rural with a dispersed settlement pattern consisting mainly of traditional villages. The municipality is located in the eastern part of the BPDM, thus bordering Gauteng and Limpopo, giving it strategic connectivity to major urban and economic centres such as Tshwane and Bela-Bela. Its economy is primarily based on agriculture, small-scale trade, with potential in agro-processing, rural tourism, and logistics, given its proximity to the N1 and R101 corridors and the Carousel Casino.

PROPOSED DEVELOPMENT OBJECTIVE

- Promote and attract investments for development within the existing development potential areas such as Makapanstad, Mathibestad and Ga-Motle.
- Enhance Integration and Connectivity among the dispersed rural settlements through improving the road infrastructure and public transport systems.
- Capitalise on Strategic Location near Gauteng, Limpopo and the access routes (N1, R101) to attract rural logistics services, agri-processing industries, and eco-tourism investments.
- Promote and emphasize the efficient development of the Agro-Processing and Agro-Hub to stimulate the rural economy, add value to primary agricultural produce, and create employment within regional value chains.
- Safeguard Agricultural Land and promote sustainable land management to protect food security and local economies.
- Protect Ecological Assets, including wetlands, river catchments, and biodiversity corridors from settlement encroachment and pollution.





Table 47: Moretele Local Municipality

NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
Moretele Local Municipality	Municipal wide	<ul style="list-style-type: none"> Demarcation of sites on proposed residential extension areas under Traditional Councils areas 	R7 800 00,00	GOGTA/COGHSTA
		<ul style="list-style-type: none"> Undertake a Wetland Study for the entire municipality 	R800 000,00	MLM
		<ul style="list-style-type: none"> Develop a comprehensive rural infrastructure rollout plan 	R2 000 000,00	BPDM
		<ul style="list-style-type: none"> Upgrade all compacted roads to tarred roads. 	R165 000 000,00	SANRAL DEPARTMENT OF PUBLIC WORKS (DPW), SANRAL
		<ul style="list-style-type: none"> Develop a Tourism Development Strategy for the Moretele local municipality 	R3 000 000,00	BPDM
		<ul style="list-style-type: none"> Develop an Integrated Transport Plan for the Municipality 	R3 500 000,00	MIG
		<ul style="list-style-type: none"> Environmental Legal Compliance audit 	R2 000 000,00	BPDM
		<ul style="list-style-type: none"> Develop a Moretele Industrial Development Strategy. 	R2 000 000,00	BPDM
		<ul style="list-style-type: none"> Develop a Moretele Agro – Processing Strategy 	R2 000 000,00	BPDM/MLM
		<ul style="list-style-type: none"> Development of the Housing Sector Plan 	R1 000 000,00	MLM/DHS
		<ul style="list-style-type: none"> Develop an ICT master plan 	R2 00 000,00	MLM



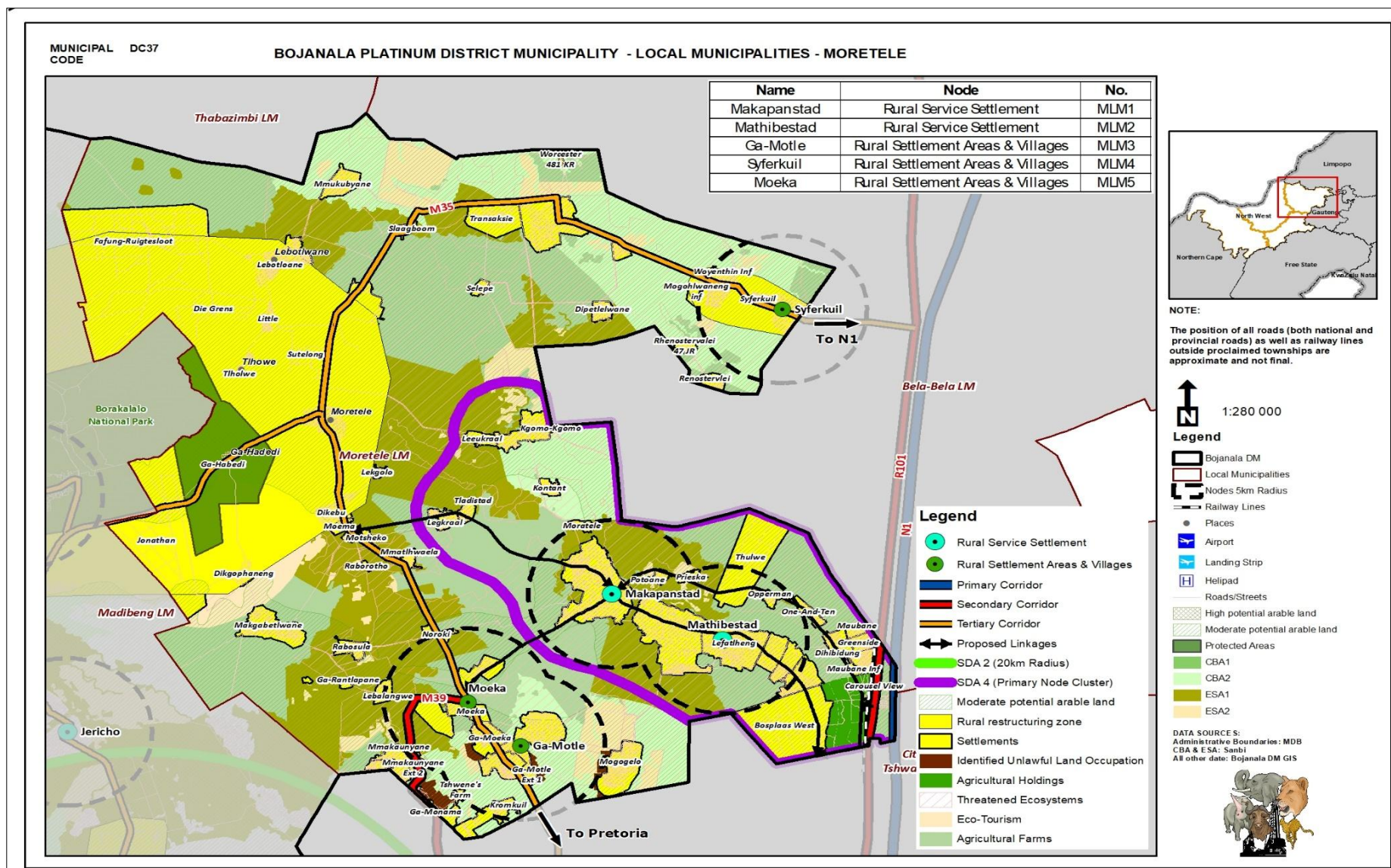
NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
MLM1	Makapanstad	<ul style="list-style-type: none"> Taxi Refurbishment in Makapanstad 	R5 400 000,00	MLM/BOJANALA PLATINUM DISTRICT
		<ul style="list-style-type: none"> Implementation of Internal Roads and Stormwater in Makapanstad 	R8 000 000,00	MIG
		<ul style="list-style-type: none"> Construction of Makapanstad Land fill site 	R250 000 000,00	BPDM
		<ul style="list-style-type: none"> Water supply and sanitation upgrading 	R50 000 000,00	WSIG
		<ul style="list-style-type: none"> Development of a precinct plan 	R2 000 000,00	DLRRD, MLM
MLM2	Mathibestad	<ul style="list-style-type: none"> Development of a precinct plan 	R2 500 000,00	DLRRD, MLM
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R40 000 000,00	MIG
		<ul style="list-style-type: none"> Water supply and sanitation upgrading 	R50 000 000,00	WSIG
MLM3	Ga-Motle	<ul style="list-style-type: none"> Formalization and In-situ upgrading 	R20 000 000,00	ISUPG
		<ul style="list-style-type: none"> Water supply and sanitation upgrading 	R30 000 000,00	WSIG
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R30 000 000,00	MIG
		<ul style="list-style-type: none"> Development of a precinct plan 	R1 500 000,00	DLRRD, MLM
MLM4	Syferkuil	<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R20 000 000,00	MIG
		<ul style="list-style-type: none"> Development of a precinct plan 	R2 000 000,00	DLRRD, MLM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
	Moeka	<ul style="list-style-type: none"> Water supply to Ga-Moeka, (Ga-Motle, Ratsiepane, Kromkuil, Mmakaunyane, Norokie) with reticulation and yard connections 	R37 350 000,00	MIG
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R20 000 000,00	MIG
		<ul style="list-style-type: none"> Development of a precinct plan 	R3 000 000,00	MLM/DLRRD
	District Links	<ul style="list-style-type: none"> Upgrading and Maintenance of District Roads 		MLM, MIG



Map 48: Moretele Local Municipality





4.5.2.4 KGETLENGRIVIER LOCAL MUNICIPALITY

Major settlements identified within the BPDm settlement hierarchy include the following:

Small Service Town: Koster and Swartruggens

Small Town: Derby


Kgetlengrivier Local Municipality is a predominantly rural area with small urban centers like Koster, Swartruggens, and Derby, strategically located along the N4 and R509 transport routes. The local economy is driven by agriculture, mining (diamond and slate), and emerging tourism opportunities. Despite infrastructure challenges, the municipality holds strong potential for inclusive and sustainable development through targeted investment in nodal growth, agro-processing, eco-tourism, and improved connectivity.

PROPOSED DEVELOPMENT OBJECTIVES




- Capitalize on KRLM's strategic location along the N4 and R509 corridors to attract investment in agriculture, agro-processing, and logistics.
- Conserve critical environmental assets, including rivers, wetlands, and protected biodiversity areas, through sustainable land use management and environmental safeguards.
- Strengthen connectivity between key towns such as Koster, Swartruggens, and Derby and surrounding rural settlements through improved transport infrastructure and nodal development.
- Upgrade and maintain essential infrastructure, including water, sanitation, electricity, and stormwater systems, to support socio-economic growth.
- Diversify the local economy by promoting small-scale farming, agro-processing, tourism, and mineral beneficiation to enhance employment and resilience.



Table 48: Kgetlengrivier Local Municipality

NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
Kgetlengrivier Local Municipality	Municipal wide	<ul style="list-style-type: none"> Establishment of an Agricultural School 	R60 000 000,00	DoE
		<ul style="list-style-type: none"> Policy for densification in already existing nodes within the Municipality 	R1 800 000,00	KRLM
		<ul style="list-style-type: none"> Informal Settlement Upgrading Programme 	R 12 000 000,00	HDA, DHS/ISUPG
		<ul style="list-style-type: none"> Establish a formally designated and registered landfill site within the municipality 	R 5 000 000,00	KRLM
		<ul style="list-style-type: none"> Feasibility study for the construction of Municipal wide cemetery 	R 1 000 000,00	BPDM
		<ul style="list-style-type: none"> Development of Tourism Master Plan 	R2 500 000,00	KRLM/BPDM
		<ul style="list-style-type: none"> Agricultural Master Plan 	R2 800 000,00	DARD, KRLM
		<ul style="list-style-type: none"> Review of the Housing Sector Plan 	R1 000 000,00	KRLM/DHS
		<ul style="list-style-type: none"> Develop an ICT master plan 	R2 000 000,00	KRLM, BPDM
	Koster	<ul style="list-style-type: none"> Koster Precinct Development Plan 	R2 000 000,00	DLRRD, KRLM
		<ul style="list-style-type: none"> Establishing a Truckstop in Koster 	R 20 000 000,00	MIG
		<ul style="list-style-type: none"> Extension of Koster Industrial Zone 	-	KRLM/BPDM
		<ul style="list-style-type: none"> Revitalisation and repurposing of the old dilapidated municipal warehouse in Koster 	R 7 000 000,00	KRLM
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R20 500 000,00	MIG



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
		<ul style="list-style-type: none"> Water supply and sanitation upgrading 	R35 00 000,00	WSIG
	Swartruggens	<ul style="list-style-type: none"> Establish a Truckstop in Swartruggens 	-	DEPARTMENT OF TRADE INDUSTRY AND COMPETITION
		<ul style="list-style-type: none"> Upgrading of internal roads in Swartruggens area 	R 5 000 000,00	MIG
		<ul style="list-style-type: none"> Feasibility study for the upgrading of electrical infrastructure in Swartruggens. 	R 2 000 000,00	KRLM
		<ul style="list-style-type: none"> Water supply and sanitation upgrading 	R30 500 000,00	MIG
		<ul style="list-style-type: none"> Upgrading of road towards the Twin Oaks Country Estate 	R 2 000 000,00	KRLM
	Derby	<ul style="list-style-type: none"> Establish General retail shops in Derby area 	R400 000,00	PPP, KRLM, DTIC
		<ul style="list-style-type: none"> Construction of sewer internal reticulation and a package plant in Derby 	R15 000 000,00	MIG
		<ul style="list-style-type: none"> Roads and Stormwater Upgrading 	R30 500 000,00	MIG
	Provincial Links	<ul style="list-style-type: none"> Upgrading and Maintenance of Provincial Roads 		SANRAL





4.5.2.6 MADIBENG LOCAL MUNICIPALITY

Major settlements identified within the BPDM settlement hierarchy include the following:

Regional Service Centre: Brits

Rural Service Settlement: Jericho and Lethlabile

Small Town: Schoemansville

Rural Settlement Areas & Villages: Fafung, Ga-Rasai

Madibeng Local Municipality encompasses a mix of rural areas and developing urban centres, with its administrative seat in Brits. Strategically positioned along the N4 Platinum Corridor and intersected by key routes such as the R510, R512, and R566, it offers vital connectivity between major economic hubs including Tshwane, Johannesburg, and Rustenburg. It boasts a diversified economy dominated by mining, home to rich Platinum Group Metals (PGMs) reserves, world's third-largest chrome producer as well as agriculture, manufacturing, and tourism. Hartbeespoort Dam, a prominent tourist destination, enhances the region's appeal, attracting visitors for its recreational offerings and natural beauty. MDLM's strategic location and economic diversity position it as a significant contributor to the Bojanala Platinum District's development.

PROPOSED DEVELOPMENT OBJECTIVES



- Build capacity in communities through skills development, human resource transformation, and targeted education and training interventions.
- Ensure sustainable, integrated, and holistic development aligned with the municipality's key priority areas and spatial framework.
- Promote inclusive economic growth through small-scale agriculture, agro-processing, mining beneficiation, tourism, and SMME support.
- Enhance infrastructure provision, including water, sanitation, roads, electricity, and housing, with a focus on resilience and spatial integration.
- Protect environmental assets and ensure sustainability through improved waste management, environmental safeguards, and eco-tourism.
- Integrate rural communities into the broader economy through infrastructure upgrades, township establishment, and formal tenure.
- Strengthen regional connectivity by enhancing road networks and transport infrastructure between key urban and rural nodes.



Table 49: Madibeng Local Municipality

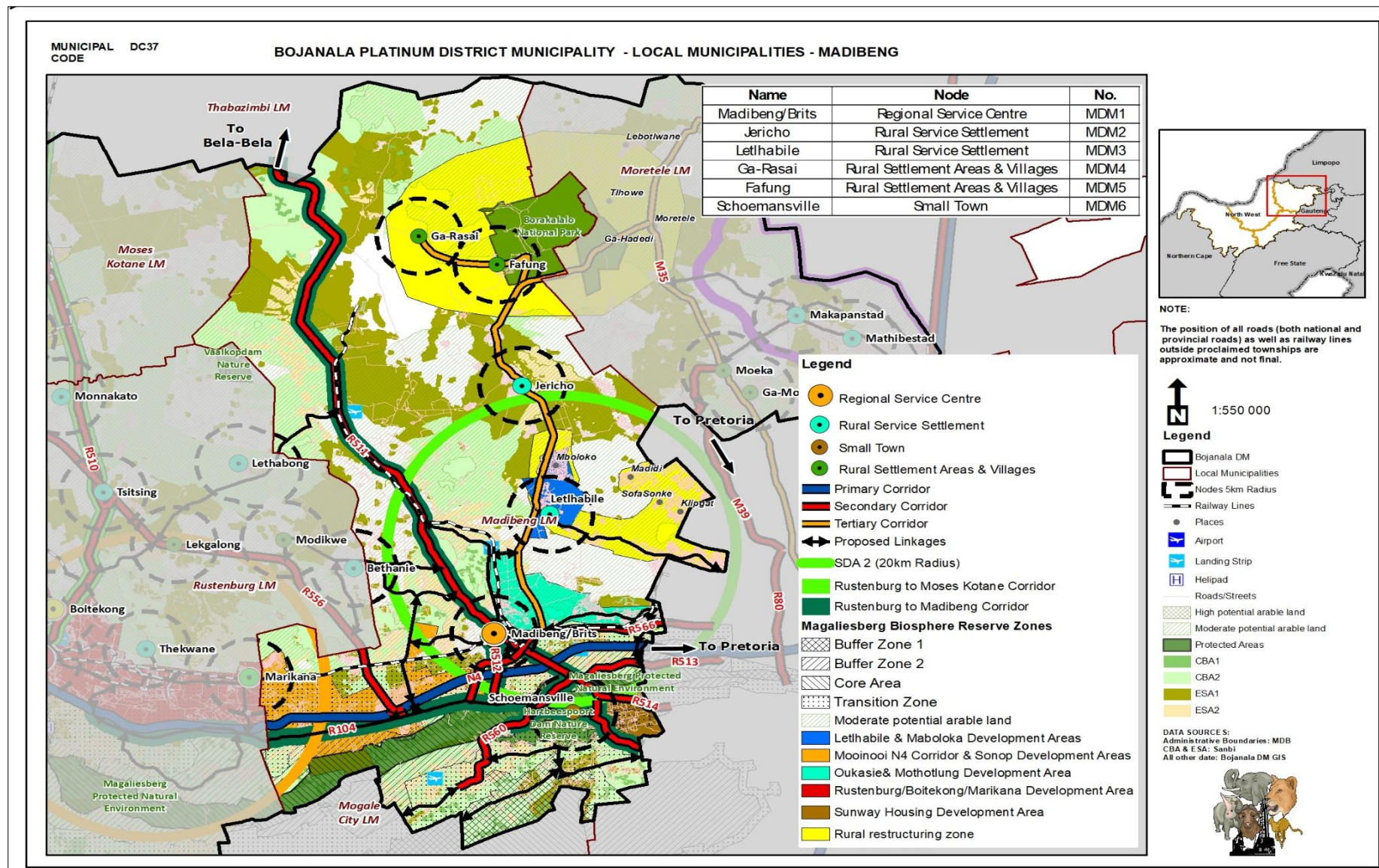
NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
Madibeng Local Municipality	Municipal wide	<ul style="list-style-type: none"> Water and Sanitation Backlog eradication: Development and implementation of an Integrated Water and Sanitation Master Plan that will be utilised by the municipality to eradicate backlogs in long term 	R25 000 000,00	WSIG
		<ul style="list-style-type: none"> Assessment and refurbishment of all dysfunctional boreholes in Madibeng LM; 	R200 000 000,00	MIG
		<ul style="list-style-type: none"> Removal or Clearing of Aquatic Weeds Projects - Crocodile River System (including Hartbeespoort and Rodekopjies Dams) in North West 	R10 894 600,00	MDLM
		<ul style="list-style-type: none"> Development of the Housing Sector Plan 	R1 000 000,00	MDLM/DHS
		<ul style="list-style-type: none"> Develop an ICT master plan. 	R 20 000 000,00	MDLM
MDM1	Brits	<ul style="list-style-type: none"> Upgrading of Brits Water Treatment Works 	R700 000 000,00	RBIG
		<ul style="list-style-type: none"> Refurbishment of Brits WWTW 	R18 633 469,39	WSIG
		<ul style="list-style-type: none"> Brits Landfill Site (Development of New Cell And Lagoon) 	R15 630 000,00	
		<ul style="list-style-type: none"> Upgrade to the CBD road network on various streets to include Resurfacing, Road markings and signage 	R 20 000 000,00	MDLM
		<ul style="list-style-type: none"> Provision of bridge from R511 into Tom Street 	R 50 000 000,00	MDLM/SANRAL
		<ul style="list-style-type: none"> Formalisation of the existing Taxi Rank – loading and off-loading, shelters, road markings, slip lanes, lighting, signage, inter alia 	R 5 000 000,00	MDLM
		<ul style="list-style-type: none"> Development of a Precinct Plan 	R 2 000 000,00	DLRRD, MDLM



NODE/LINK/ZONE	NODE DESCRIPTION	PROJECTS	ESTIMATED COST	FUNDING SOURCE
MDM2	Jericho	• Jericho Bulk Water Line	R6 000 000,00	WSIG
		• Roads and Stormwater Upgrading	R 25 000 000,00	MIG
MDM3	Lethlabile	• Lethlabile Taxi Rank	R13 000 000,00	MIG
		• Upgrade of Lethlabile Bulk Water Supply	R100 000 000,00	WSIG
		• Lethlabile Sport Facility Upgrad\	R2 500 000,00	MIG
MDM4	Ga-Rasai	• Water and sanitation upgrade	R 20 000 000,00	WSIG
		• Roads and Stormwater Upgrading	R 20 000 000,00	MIG
MDM5	Fafung	• Upgrading Of Fafung Internal Bus Route	R2 000 000,00	MIG
		• Water and sanitation upgrades	R 20 000 000,00	WSIG
MDM6	Schoemansville	• Refurbishment and upgrade of Schoemansville sewer pump stations	R60 000 000,00	WSIG
		• Upgrade of Schoemasville Water Treatment Works (from 10MI/d to 20MI/d)	R80 000 000,00	WSIG
		• Schoemansville Replacement of AC bulk Pipeline to the Kommandonek reservoir, as well as the internal reticulation	R20 000 000,00	MIG
	Provincial Links	• Upgrading and Maintenance of Provincial roads	-	SANRAL
	District Links	• Upgrading and Maintenance of District Roads	-	MDLM



Map 50: Madibeng Local Municipality





4.6 FUTURE POPULATION PROJECTION AND DEMAND

Based on the previous population within the BPDM, the following sets out the projected population of the BPDM in the years 2030 and 2035. To calculate and project the population growth rates for the local municipalities within the BPDM, the annual compound growth rate formula is used and applied it to the census data from 2001, 2011, and 2022. The annual growth rate between two census years is calculated using $\text{Annual Growth Rate} = (\text{Pend} / \text{Pstart})^{1/n} - 1$. Pend is the population at the end year (2022), Pstart is the population at the start year (2011), and n is the number of years between censuses.

To project the population growth for the years 2030 and 2035, the formula $P_{\text{future}} = P_{\text{current}} \times (1 + r)^y$, where r is the annual growth rate and y is the number of years from the last census (which is 2022).

The BPDM population is projected to grow to approximately 1,716,623 in the year 2030 and approximately 1,777,978 people by the year 2035 based on the current growth rate per municipality.

Table 50: Population Growth Rates (% per annum)

BPDM POPULATION GROWTH RATES (% PER ANNUM)					
BPDM Local Municipalities	Census 2001 Population	Census 2011 Population	Census 2022 Population	Growth Rate 2001–2011	Growth Rate 2011–2022
Rustenburg	387,096	549,575	562,031	3.57%	0.20%
Madibeng	343,419	475,796	522,566	3.31%	0.86%
Moses Kotane	237,175	242,554	265,668	0.22%	0.83%
Moretele	183,116	188,533	219,120	0.29%	1.38%
Kgetlengrivier	36,477	51,049	54,759	3.42%	0.64%
TOTAL	1,187,283	1 507 507	1,624,144		



Table 51: BPDM Projected Populations (2030 and 2035)

BPDM PROJECTED POPULATION (2030 and 2035) based on 2022 AGR		
BPDM Local Municipalities	Projected 2030 Population	Projected 2035 Population
Rustenburg	571,267	577,116
Madibeng	559,443	583,802
Moses Kotane	283,850	295,840
Moretele	244,438	261,727
Kgetlengrivier	57,625	59,493
TOTAL	1,716,623	1,777,978

These projections assume that the growth trends based on the 2011–2022 growth trends of the various municipalities, although other external factors may also influence the growth rate of the municipalities. The varying growth rates may be reflected by the differences in economic development, infrastructure, and migration patterns among the municipalities. Rustenburg and Madibeng, as economic hubs, may continue to attract population and further developments and investments may contribute to such growth.

An estimate on the number of households, is also provided on the table 52 below, by dividing the projected population by the 2022 average household size, assuming household sizes stay constant. This helps to

highlight the projected Households by the years 2030 and 2035, which gives a highlight on the number of additional dwellings that may need to be provided to cater for the projected population growth within the BPDM. The projected household number by the year 2030 shows that there might be an additional 28,409 households within the BPDM, and an additional 18,806 households by the year 2035.

Table 52: Number of Households projections (2030 and 2035)

NO OF HOUSEHOLDS PROJECTIONS (2030 and 2035)					
BPDM Local Municipalities	Households Census 2011	Households Census 2022	Avg HH Size (2022)	Projected HH 2030	Projected HH 2035
Rustenburg	199,035	203,658	2.8	203,960	206,007
Madibeng	160,041	173,188	3.0	186,540	194,700
Moses Kotane	75,193	79,404	3.3	85,600	88,947
Moretele	52,744	60,058	3.6	67,920	72,738
Kgetlengrivier	14,673	15,183	3.6	15,880	16,314
TOTAL	501,686	531,491		559,900	578,706

The table 53 below shows the land requirements per municipality in Bojanala Platinum District Municipality (BPDM) based on projected



household growth and assuming a gross density of 25 dwelling units per hectare.

Table 53: Land requirements for the estimated new households

LAND REQUIREMENTS FOR NEW HOUSEHOLDS IN BPDM				
BPDM Local Municipalities	New Households (2022–2030)	Land Required (ha) 2030	New Households (2022–2035)	Land Required (ha) 2035
Rustenburg LM	302	12.08	2,349	93.96
Madibeng LM	13 352	534.08	21 512	860.48
Moses Kotane LM	6 196	247.84	9 543	381.72
Moretele LM	7 862	314.48	12 680	507.20
Kgetlengrivier LM	697	27.88	1 131	45.24
TOTAL	28 409	1,136.36 ha	47 215	1 888.6 ha

development that will be fostered in these areas. Including Kgetlengrivier LM which, though small, still requires planned land allocation to meet future housing needs.

Madibeng, Moretele, and Moses Kotane, according to the projections, show substantial land needs; these areas may need new residential planning and infrastructure to support the projected growth and



ANNEXURES



ANNEXURE A

COMMUNAL PROPERTY ASSOCIATIONS WITHIN THE BOJANALA PLATINUM DISTRICT MUNICIPALITY

CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
Baphalane	06/0943/A	MOSES KOTANE	Portion 4 Farm No.281	104.4585	No Info	0.0
A Re Itekeng Bathlaro	07/1010/A	No Info	Remaining Extent Of The Farm Hertford 309 II, Portion 2 Of The Farm Hetford 309 II, R/E Of Portion 5 Of The Farm Radnor 305 II, Portion 3 Of The Farm Hertford 309 II, R/E Of The Farm Radnor 305 II,	5403.19	No Info	0.0
Bakgatla Ba Moseitha	09/1217/A	Moretele	Transactie Farn No. 3 Jr, De Putten No. 4jr, Portion 1 Of Vogelstruispan No. 6, Portion 1 Of Vooruitzicht No. 7 Jr, Zwartboom No. 9 Jr, Portion 1 Of Haakdoornbult No. 49 Jr, Portion 2 Of Leeuwkraal No. 50jr, Portion 3 Of Leeuwkraal No. 50 Jr, Portion 5 , 6 And 7 Of Leeuwkraal No. 50jr,Portion 4 Of Buffeldrift No. 51 jr, Lochness No. 478 Kr, Tower No. 480 Kr, Worcester No. 481 Kr, Hartebeeslaagte No.66 Jq, Tambootielaagte No. 164 Jq, Portion 1, 2 , 3,4 And 5 Of Klipdraai No. 166 Jq, De Grens No. 168 Jq, Portions 1,2,3,4,5,6,7,8,9 And 10 Of Flink Zyn Drift No. 169 Jq, Portions 1,2,3,4,5,7 , 8 And 9 Of Rhenosterdrift No. 172 Jq, Portion 1, 2 ,5 Of Wildebeeskuil No. 173 Jq, Kalkbank No. 234, Walterval No. 561, Klippoortjie No. 564 Kq	52251.8211	Walterval Ptn 0 (2985,5404)(T77809/2018), Lochness Ptn 0 (1877,5395)(T77809/2018), Tambootie Laaget Ptn 0 & 1 (3596,2695)(T7789/2018), Klippoortjie Ptn 0 & 2 (1041,1757)(T77809/2018), Leeuwkraal Ptn 2,3,5,6 & 7 (1575,9532)(T77809/2018), Haartebeeslaagte Ptn 0 (1085,772)(T77809/2018)	0.0
Bakubung Ba Ratheo Of Molote	00/0241/A	Rustenburg	The R/E And Portion 1 Of The Farm Palmietkuil 25 Iq, R/E Of Portion 4 And 5 Of The Farm Elandsfontein 21 Iq, R/E And Portion 3 Of The Farm Weltevreden 26 Iq, Syferfontein 381 Jq, Vogelstruisnek 14 Iq And Buffelsfontein 382 Jq	No Info	Palmietkuil Ptn 0 (3196,1092)(T15353/1967) Ptn 1 (0,3652)(T47080/2003), Elandsfontei Ptn 1,4 & 5 (1396,9009)(T47080/2003)	0.0



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
Bambanani (Awaiting File)	16/1487/A	Rustenburg	No Info	0	Portion 48 Of The Farm Buffelsfontein No.382 Jq (T20443/2017)	206.0816
Baphalane Ba Sesobe	03/0563/A	MOSES KOTANE	The Remainder Of Portion 2 Of The Farm Tweekopiesfontein No.143 Kp (1457.2251 Ha), Portion 3 Of The Farm Tweekopiesfontein No.143 Kp (159.4246 Ha), The Remainder Of Portion 2 Of The Farm Tweekopiesfontein No.143 Kp (1608.2984 Ha)	3224.948	No Info	0.0
Bapolomiti	12/1301/A	Moses Kotane	Farm Palmietfontein No. 208 Jp	150.8117	PTN 3(96,571 ha)(T27278/2014), PTN 4(230,9556 ha)(T27278/2014), PTN 5(1413,285 ha)(T27278/2014), PTN 2(110,0298 ha)(T38357/2012) of Farm Palmietfontein No. 208 JP	1850.841
Barokologa di	07/0984/A	MOSES KOTANE	Farm Sebele 931 Kp, Wolwehoek 135 Kp, Doornhoek 134 Kp	7000	No Info	0.0
Basiana Ba Montshe	13/1339/A	Kgetlengrivier	The Remaining Extent Of Portion 0 Of The Farm Eenzaamheid 376 Jp, Portion 1 Of The Farm Eenzaamheid 384 Jp And Portion 1 Of The Farm Doornkloof 382 Jp	213	Farm EENZAAMHEID, Ptn 0(203,102 ha)(T105127/2015) and Farm DOORNKLOOF Ptn 1(0,5325 ha)(T105127/2015) and Farm EENZAAMHEID Ptn 1(10,3198 ha)(T105127/2015)	213.9543
Bataung Ba Ga Selale	07/1002/A	No Info	Portions 2 Remainder Of Portion 4 And Portion 5zephanyeskraal 251 Jq	968.9402	No Info	0.0
Batlhaping Ba Ga Phetlhu	06/0923/A	Kgetlengrivier	Remaining Extent, Portion 1, Remaining Extend Of Portion 3, Portion 4 Gamahoudi 122 Rd, Remaining Extentletchalatchu 199 Hm, Portion 9 & 10 Boland 133 Rd And R/E Mora Schuba 201 Rd	7308.7674	Ptn 5(576,1705 ha)(T134881/2007), Ptn 4(192,7697 ha)(T134881/2007)	768.9402



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
Borolelo	99/0178/A	Kgetleng Rivier	Stand No 648/403 Rodeon Township Jp. Measuring 1050 Sqm (T79777/92)	No Info	Erf 648/403 Rodeon Swaruggens (T18173/2000)	0.7136
Bote	18/1557/A	Rustenburg	Remainder Of Portion 3 Of Farm Bulhoek 75 Jq	331.3516	No Info	0.0
Boyskraal Madibamat sho	07/1006/A	KGETLENG	Remaining Extent Of Portion 3 Of The Farm Booykraal 20 Jq	1120.8236	No Info	0.0
Dikgatlong	07/0965/A	Local Municipality of Madibeng	Portions 11 (A Portion Of 8), 47 (A Portion Of 11) 79 (Consolidated 72 & 78) 1 (Remainder), 75, 27 (Re Of Portion 8) , 104 (Consolidated 8 & 17), 2 (Re) Of The Farm Tweerivier 197 Jq, Orina 949 Jq And Bulhoek 931 Jq (Consolidated Portion 3 And 91)	2438.8047	Portions 89 and 26 others of the farm TWEERIVIER (T63051/2009)	4738.8539
Diratsagae	98/0042/A	Kgetlengrivier Local Municipality	The Farms Hartebeesfontein 431 Jp And Koedoesfontein 432 Jp	No Info	Portions 13 (659.6282 Ha) and 15 (757.2029 Ha) 10 (210.7716 Ha) and portion 1 (175.5156 Ha) of the farm HARTEBEESTFONTEIN. Portions 1 (663.4061 Ha) 6 (177.5965 Ha) 4 (342.6061 Ha) 0 & 616.7181 Ha) and 5 (177.5965 Ha) of the farm KOEDOEES FONTEIN	4660.974
Esjobe	13/1340/A	MOSES KOTANE	Portion 1 Of Farm Klaesroom 147 Kp	492.2904	No Info	0.0
Ga Habedi	07/1003/A	MORETELE	Remainder Of Portion 1 Of Farm Zoutpansleegte No. 177 Jq	1963.217	No Info	0.0
Ga Matshipa	01/0281/A	Zeerust	Portion 125 Of The Farm Rietvlei Jq	51.9402	Schietkraal ptn 8 (66,3768)(T99704/2007),	66.3768
Itireleng Balimi Rui Segwaelan e	01/0295/A	Madibeng	Portion 931 And 1086 Of The Farm Hartebeestpoort B 410 Jq	23.9184	Ptn 931 Of Hartebeestpoort B410 (T69199/2001)	23.92
Jonathan	07/0995/A	Madibeng	Portion 340 Jonathan 175 Jq And Portion 1 Klipdraai 166 Jq	1107.6976	Klipdraai ptn 1 (104,9458) (T55848/2016), Jonathan ptn	169.6976



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
					340 (64,7518)(T101568/2014)	
Katlegong Section, Modderspruit	99/0179/A	Madibeng	Portions 91 (A Portion Of Portion 1), Portion 101 And 25 Of The Farm Groenkloof 464 Jq	34.8389	Groenkloof Ptn 115 (11,7474)(T22195/2001), Ptn 93 (21,0839)(T151094/2001), Ptn 117 (5,0069)(T80875/2001), Ptn 91 (16,6008)(T122294/1999)	0.0
Lelotong	07/0972/A	Moretele	Portion 3 Of The Farm Aasvogelboom 176 Jq	654.591	Aasvogelboom Ptn 3 (564,059)(T27923/2017)	564.059
Magokgwane	01/0309/A	Kgetlengrivier	No Info	0	Panfontein Ptn 5 (393,6276)(T43511/2017),	0.0
Magokgwane	06/0942/A	Kgetlengrivier	Portion 1 Of Farm Kafferskraal 493 J.P (1726.2198 Ha) (T28097/1990), Portion 2 Of Farm Kafferskraal 493 J.P (786.3257 Ha) (T23448/1983), Portion 3 Of Farm Kafferskraal 493 J.P (698.4834 Ha) (T23449/1983), Portion 4 Of Farm Kafferskraal 493 J.P (729.9784 Ha) (T23450/1983)	3941.007	Kafferskraal ptn 0,1,2 & 3 (3941,0073)(T80605/2016)	3941.0073
Mamerotse	06/0882/A	Madibeng	Portion 25 And 29 Of The Farm Volgefontein 191 Jq	No Info	Uitspan Ptn 0 (216,81)(T74912/2010), Vaalboschlaagte Ptn 0 & 2 (375,8713)(T75657/2007), Atoom Ptn 0,2 & 1 (802,6784)(T102134/2006), Vogelfontein Ptn 50 (109,1853)(T15912/2008), Ptn 41 (204,288)(T119464/2006), Ptn 16,17,20,52,53 & 56 (946,8451)(T113961/2006)	0.0
Matebeleng	07/1068/A	Madibeng	Portions 2 (R/E Of Portion 177 And R/E Of Portion 834 Of The Farm Roodekopjies 427 Jq)	88.1692	Roodekopje of Zwartkopjes (58,5823)(T18167/2008)	58.5823



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
Mekgareng	07/1009/A	Madibeng	Portion 211 (Portion Of Portion 3) Of The Farm Broederstroom 481 Jq	23.1264	Broederstroom Ptn 143 (32,3169)(T41896/2016), Ptn 211 (23,1264)(T46993/2008), Ptn 121 (9,1364)(T56618/2008), Ptn 120 (27,0244)(T56617/2008), Ptn 17,189 & 30 (64,4084)(T41896/2016)	0.0
Mmantsose	15/1418/A	MORETELE	Portion B A Portion Of Farm Elandsfontein No. 440 Jq	239.4194	No Info	0.0
Modiane-Lekgolo	07/0973/A	Moretele	Portion 8 Of Portion 3 Of Farm Rhenosterdrift 172 Jq	741.9092	Rhenosterdrift Ptn 8 (741,9092)(T633/2018)	741.9092
Mokopole	09/1215/A	RUSTENBURG	Kafferskraal 133 Jq	5000	No Info	0.0
Molokwane	16/1488/A	Kgetleng Rivier	Portions 0, 4, And 9 Of The Farm Selonskraal 317 Jq	337.5651	Selonskraal Ptn 4 (337,5651)(T32523/2017)	337.5651
Mooke	08/1112/A	Madibeng	Blockspruit 157 Jq, De Mond Van Blockspruit 158 Jq, Ruigtepoort 162 162 Jq, Kenkelbos 152 Jq	11383.6216	Kenkelbos Ptn 0,1,2 & 3 (1590,0261)(T86296/2017), Ruigtepoort Ptn 0 (3413,5612)(T86290/2017), De Mond van Blokspruit Ptn 1,2,3,4,5,6,7,8,9,2,23,24,25, 26,27,28,30,31,34,35,38,39, 40 & 41 (4617,7795)(T86296/2017)	0.0
Moropeng Cpa	07/0994/A	No Info	Portion 3 Of Farm Buffelsdraain No. 151 Jd	0	No Info	0.0
Ngwanadira	06/0904/A	Local Municipality of Madibeng	Hartebeespoort No. 410 Jq	12000	Portion 1286 and 143 others of the farm Hartebeespoort No. 410 Jq	122279.9639999 9998
Paalkraal	12/1320/A	Local Municipality of Madibeng	Portion 1 Of The Farm Paalkraal 556 Kq	2179.2908	Portion 1 Of The Farm Paalkraal 556 Kq (T43542/2016PTA)	127631.2784999 9997
Po Land	00/0233/A	Madibeng	The Farm Broederstroom 481 Jq No 294	4.9369	Portion 330 (A Portion Of Portion 294) Of	4.9369



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
					Broederstroom Farm 481 (T25034/2001)	
Polonia-Schietfontein	07/0986/A	Local Municipality of Madibeng	Portion 6 (Of Portion 1) Of Krelingsport No. 425 Jq	14.561	Portion 6 (Of Portion 1) Of Krelingsport No. 425 Jq (T158034/2007)	14.561
Ramalebane	07/1052/A	MOSES KOTANE	Portion 17 (R/E Of Portion 18 & 33 Of The Farm Ysterfontein 198 Jq)	235.3072	Portion 31 (210.8965 Ha), 43 (481.0318 Ha) and portion 27 (318.2128 Ha) of the farm YZERFONTEIN (T85542/2008)	1010.1411
Ramalebye	09/1212/A	No Info	No Info	No Info	No Info	0.0
Ramotlakan	10/1250/A	Kgetlengrivier Local Municipality	Portions 1 ,2, 7, 9, 13, 17 & 21 Of The Farm Klippan 140 Ip And Portions 1, 5, 6, 24, 25 And 36 Of The Farm Leliefontein 138 Ip	5573.914	Portions 16 (156.8539 Ha) 15 (185.75 Ha) 11 (225.7065 Ha) 9 (383.3584 ha) 3 (254.5903 Ha) 2 (383.3611 Ha) and portion 1 (428.266 Ha) of the farm Klippan and Portion 36 (434.1028 Ha) 25 (286.9802 Ha) 24 (271.9666 Ha) 6 (42.8266 Ha) 5 (256.9596 Ha) and portion 1 (798.4206 Ha) (T76397/2010) of the farm Leliefontein	4109.142600000001
Rasekata Serala	07/0979/A	Moretele Local Municipality	Portion 3 Of The Farm Buffelspruit 51 Jr	6806.6674	Portion 3 Of The Farm Buffelspruit 51 Jr (T45021/2016)	1268.2213
Rathateng Cpa	06/0869/A	Local Municipality of Madibeng	Farm Snymansdrift 413 Jq	366.2458	Portions 19 (32.0316 Ha) (T25303/2006) 16 (25.7368 Ha) (T29734/2006) and portion 16 (31.9245 Ha) (T37448/2006) portion 7 (12.4801 Ha) of the farm SNYMANSDRIFT	102.173
Reboetswe Cpa	05/0817/A	Local Municipality of Madibeng	Portion 77,79,81,50,55,60,46,56,61,63,57,59 & 48 Of Farm Zandrif 212 Jq	366527.02	Portion 77,79,81,50,55,60,46,56,61, 63,57,59 & 48 Of Farm	1071.3556999999998



CPA Name	Registration Number	Local Municipality	Intended Properties Description	Intended Hectares (Ha)	Transferred Properties Description	Transferred Hectares (Ha)
					Zandrift 212 Jq (T1491/2008) (T133025/2006)	
Rkm Mankwe West	08/1069/A	MOSES KOTANE	Portion 13 Of Portion 1, Portion 12 Of Portion 2 And Portion 9 Of Portion 5 Of The Farm Vogelstruisnek 173 Jp, Portion 19 Of Portion 5 Of The Farm Ruighoek 169 Jp	261.7645	No Info	0.0
Schaapkraal	06/0932/A	Rustenburg Local Municipality	Portions 5 (Re) (T36334/1985) And Portion 8 (T42151/1983), 22 (T7054/1984) And 25 (T27167/1979)	869.7078	Portions 27, (T94718/2007) 22, 25, 5, 8 and 19 (806.9316 Ha) of the farm SCHAAPKRAAL. Portions 1, 2 & 3 of the farm Langkloof (T91100/2017)	806.9316
Segwaelane Balemi Itsoeng	01/0296/A	Madibeng	Portions 935 Of The Farm Hartebeespoort B 410 Jq	19.5325	Remaining Extent Of Portion 935 Of Hartebeestpoort B410 (T47222/2001)	19.5325
Sepuputle	07/0996/A	Local Municipality of Madibeng	Buffelspoort 149 Jq, Slipfontein 551 Jq, Mooimeisiesfontein 147 Jq, Kwarriekraal 148 Jq, Sterkfontein 145 Jq, Langkloof 153 Jq, Rooisloot 20 Jq, Swarhoek 10 Jq	17710.0276	Portion 1, 2 & 3 of the farm Langkloof, portions 1 of the farm Splitfontein, Portion 1 & of the farm Kwarriekraal (T91100/2017), portions 44, 29, 23, 6, 48, 46 & 26 of the farm Buffelspoort (T15068/2011)	8179.3673
Serobatse Family Cpa	04/0677/A	No Info	Portion 2 And The Remaining Extent Of The Farm Booykraal 20 Jq	977.2977	No Info	0.0
Syferfontein	04/0724/A	Kgetlengrivier Local Municipality	Syferfontein 519 Jp	No Info	Syferfontein 519 Jp (T98106/2005)	437.9002
Tirirano	99/0180/A	Kgetleng Rivier	Portion 17 Of The Farm Doodrift No 410	No Info	Ptn 17 Doordrift 410 Jp (T150495/1999)	17.844
Areboetswe Bakwena	02/0433/A	Moses Kotane	Mooiland' of that portion of the Quitrent Zamenskomst No. 88 JP	5710.4031	Mooiland' of that portion of the Quitrent Zamenskomst No. 88 JP	5710.4031

SOURCE: NW CPA DATABASE 2024



GLOSSARY OF TERMS

Apartheid

A political system and its associated set of laws and policies focused on the social, economic and spatial separation of different ethnic and racial groups. Spatially, Apartheid involved the physical separation of 'the four racial groups', according to the Population Registration Act of 1950, into so-called "Group Areas" in accordance with the Group Areas Act of 1950. At the macro, national level, a system of ethnically-based "Bantustans" for Black South Africans was also established.

Bantustan

Areas reserved for African occupation under the Apartheid government. Approximately 13% of the total area of South Africa was divided into ten such Bantustans, which were given some degree of self-rule, but subject to the wishes and needs of the Apartheid government. While these areas were reincorporated into South Africa at the dawn of democracy in 1994, they still suffer the consequences of long-term neglect, isolation and poverty.

Biodiversity

The variability among living organisms from all sources, including, terrestrial, marine and other aquatic ecosystems, and the ecological

complexes of which they are part. It also includes diversity within species, between species, and of ecosystems.

Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)

These are natural areas of critical importance for ecological sustainability and should be kept in their natural, or at least semi-natural state. The management objective of CBAs is for identified areas to be maintained in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity, and sensitive land uses are appropriate. Areas identified as ESAs should be kept in at least a 'semi-natural condition', i.e. with their basic ecological functioning still intact.

City

A human settlement characterised by (1) large and generally diverse communities of people living at high residential densities, (2) a wide range of economic sectors and employment opportunities, and (3) high-intensity business and commercial areas.

Climate Change Adaptation

The process of adjustment to actual or expected climate change and its effects.



Climate Change Mitigation

The use of new technologies and renewable energies with the aim of (1) making older equipment more energy-efficient, and/or (2) changing management practices or consumer behaviour to reduce the emission of greenhouse gasses.

Concentration

The act/process of drawing/bringing people and/or activities closer together, or the outcome of such acts/processes i.e. (1) a higher density of people, and/or (2) a higher intensity and mix of activities in a specific area or place. Generally, such concentration supports the development and sustenance of “agglomeration economies”. This can take the form of “urbanisation economies” (where cost decreases as the total output of an urban area increases) or “localisation economies” (where costs decrease as firms in a specific industry increase output).

Decentralisation

The flow of people and economic activities from an urban centre or node to outlying (suburban and/or peri-urban) areas or nodes.

Densification

The process of increasing the number of people living in a specific area or place, to ensure that (1) better use is made of movement infrastructure, services, ICT networks, and amenities by a greater

number of people, and (2) the need for spatial expansion of existing settlements, grids, networks and services is reduced.

Development Corridor

An integrated linear network of dense infrastructure, economic activity and residential development built on and along a major road and/or railway line that (1) bind(s) it together and (2) act(s) as (a) form-giving and structuring spine(s). Development corridors typically fulfil a variety of multiple, complex and interrelated functions, such as: (1) the movement of people and freight; (2) retail and trade; (3) the flow of information; (4) the provision of basic services, such as water and gas; and (5) tourism. Supportive functions may also be located in corridors, e.g. logistics. Development corridors generally include both a human settlement and economic component, i.e. (1) higher-density, transit-oriented mixed-use residential development, and (2) industrial, retail, entertainment and office development adjacent to, or along, the main transport routes.

Diversification

The process of introducing and/or allowing a greater mix of land-uses in an area, to: (1) boost local people-to-people service economies; (2) stimulate co-production of knowledge, innovation and jobs; (3) reduce the need for motorised travel, and shorten travel distances; (4) bring



more vibrancy and life to an area; (5) enhance social interaction and cohesion; and (6) make better use of land.

Ecological Footprint

A measure of the 'load' imposed by a given population on natural systems. The bigger the footprint, the greater the impact.

Ecological Infrastructure

Ecological infrastructure refers to naturally functioning ecosystems that generate or deliver valuable services to people, e.g. water catchments, wetlands, riparian zones, coastal dunes, kelp beds and/or spawning grounds. Ecological infrastructure consists of a network of interconnected structural elements in the landscape and seascape.

Ecological Infrastructure Network Refers to and emphasises the interconnected ecological infrastructure as a single concept in the national space.

Economic Sectors

A description of (1) the type/kind of economic activities in a country or region, or (2) the kinds/types of activities in which the population of a country or region are active/employed. The following five categories/ sectors of economic activity are generally used in such descriptions: (1) the 'primary sector', which includes agriculture, mining and other natural resource-based industries; (2) the 'secondary sector',

which entails manufacturing, engineering and construction; (3) the 'tertiary sector', meaning service industries; (4) the 'quaternary sector', which refers to intellectual activities involving education and research; and (5) the 'quinary sector', which refers to high-level decision-making in government and industry. In some instances, including this NSDF, the last two sectors are included in the definition of the tertiary sector.

Ecosystem

The dynamic and complex interplay of animal, plant, and micro-organism communities and their non-living environment (soil, water, climate and atmosphere) as a functional unit. Ecosystem Services The beneficial services that nature provides to people.

Ecosystem services are typically grouped into four broad categories: (1) 'provisioning', including the production of food and water; (2) 'regulating', including the control of climate and disease; (3) 'supporting', including nutrient cycles and oxygen production; and (4) 'cultural', including spiritual and recreational benefits.

Evidence Mapping

A structured process of seeking, ordering, and making sense of relevant published and unpublished research, i.e., 'evidence', to inform the preparation and review of policy and legislation.



Food Security

A condition of having reliable access to a sufficient quantity of affordable and nutritious food through locally-grown produce and/or imports. Food security exists when people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Human Settlement

A place where people live, work, study, relax and play. A settlement can range in size from (1) a small number of dwellings grouped together, to (2) a large city or groups/conglomerations of cities tied together through dense transport and communication networks. Infrastructure The basic equipment, utilities, productive enterprises, installations, and services essential for the development, operation, growth, sustenance and continued viability of human settlements and economic activities. Infrastructure includes items such as: (1) roads, railway lines and stations, airports, and harbours; (2) utility lines and related structures for the provision of water, sanitation, electricity and drainage services; and (3) information and communications technology grids/networks. A distinction is often made between (1) 'engineering infrastructure', such as roads, electricity, sewerage and water services; and (2) 'social infrastructure', which includes facilities at which social

services, such as health, education, community, welfare support, citizen registration, and cultural facilities are offered/provided.

Land Use Pattern

A general description of how (1) land is used in a specific geographic area, or (2) one or more types of land use is/are distributed across a specific geographic area. In the context of the NSDF, the national land use pattern is a high-level description of how the (1) population, (2) settlements, (3) economic activities, and (4) natural areas are distributed and systemically related across and within the country as a whole.

Land Reform

The process of correcting the historical imbalances in the ownership of, and access to land. It entails three types of intervention by the State: (1) "land restitution", meaning the redress of wrongs committed during the Colonial and Apartheid Eras; (2) "land redistribution", meaning the provision of land for residential and economic purposes to those who do not have the means to access land; and (3) "tenure reform", meaning the provision of security of tenure to those who do not have it due to historical or other reasons.



National Development Paradigm

The overarching set of ideas and beliefs and its associated legal and policy framework, setting out how (1) a country should be developed, (2) its economic relations should be structured, (3) the benefits of its economic system should be shared, and (4) its natural resources should be used and managed.

National Social and Economic Interactions

The dense series of social and economic activities that take place in a country.

National Spatial Development Framework

A national spatial planning instrument with a long-term horizon that (1) is mandated by the Spatial Planning and Land Use Management Act, 2013 (SPLUMA), (2) has to be aligned with the National Development Plan (NDP), and (3) is adopted by Cabinet as official national spatial development policy for implementation throughout the country. As such, it provides: (1) an overarching spatial development framework including a set of principle-driven spatial investment and development directives for all three spheres and sectors of government, meaning 'where, when, what type, and how much to invest and spend throughout the country'; and (2) a set of strategic spatial areas of national importance from an ecological, social, economic and/or ICT or movement infrastructure perspective to be focused on and targeted

by government and the private sector in the pursuit of strategic national development objectives and/or the prevention or mitigation of national crises.

National Spatial Development Logic

The approach to, and the way in which national space is used and managed in pursuit of the objectives of the prevailing 'national development paradigm'.

National Spatial Development Pattern

The outcomes of the 'national spatial development logic' of a country in national space. As such, it entails (1) questions related to where, how, and for whom settlements are built, and (2) aspects related to land-tenure and land-use mix, density, intensity and distribution in settlements.

Natural Resource Foundation

The natural resources of a country, consisting of both (1) ecosystem services and (2) sensitive and important ecological systems. These resources need to be defined, mapped and protected, preferably by law, and their utilisation carefully managed for the benefit of the ecological system and the sustenance of future generations.



National Ecological and Biodiversity Management Areas

A spatial planning category defined for the purpose of the NSDF. It consists of all Critical Biodiversity Areas and Strategic Water Source Areas.

Node

Nodes are concentrations/clusters of mixed land-uses. Ideally, such nodes should include high-density residential land-uses and public transport and inter-modal transport facilities. In accordance with national legislation and international protocols, nodal development must also adhere to and advance the principle of 'universal access', which refers to the conscious act of ensuring that all spaces and facilities are accessible to all people at all times, irrespective of their age, gender or disability.

Polycentric System

A functionally integrated system of settlements/nodes of varying size that co-exist and collaborate in mutually beneficial ways, and in doing so, enhance the resilience of the system and its constituent parts. The system allows the provision of a series of economic, social and other services by harnessing, strengthening and optimising (1) the unique qualities of the settlements/nodes in the system, and (2) the connections between them.

Protected Area

An area of special natural, ecological, architectural or historical interest that is protected by law. The protected areas referred to in this NSDF are those areas that are officially classified as such in terms of the National Environmental Management: Protected Areas Act (Act No. 57 of 2003).

Resilience

The capacity of a system (human or ecological) to respond to a disturbance by (1) resisting damage and (2) recovering rapidly.

Rural Area

Generally regarded as areas outside cities and towns. Economic activities in these areas (1) are in most cases intrinsically tied to the use and/or beneficiation of natural resources, and (2) typically consist of agriculture, fishing, agro-processing, forestry, nature conservation, eco-tourism and/or mining. In South Africa, there are rural areas that are densely populated, but without (1) the distinct and diverse nodal areas of dense economic activity, or (2) the wide range of supporting, enabling and life-enhancing amenities typically associated with urban areas. These rural areas are a remnant of colonial and Apartheid spatial planning and the creation of the Bantustans.



Rural Development

The process of improving the quality of life and economic well-being of people living in a rural area by planned interventions in (1) the ownership and use of land in the area, (2) the provision, maintenance and upgrading of transport and communication infrastructure, both in the area, and between the area and other rural and urban areas it is systemically connected to, (3) the type and intensity of economic activities in the area, (4) the quantity and quality of social, education, welfare and safety and security services in the area, and (5) the 'presence' and capacity of the State as institution in the area.

Rural Edge

A line that is used to delineate a systemically integrated area/region that has distinct rural qualities, often related to natural resources and unique ecosystems, that need to be protected from 'intruding uses' that may disrupt or destroy these qualities and/or systems. Typically, the delineation of such an edge would be accompanied by (1) a description of the kinds of activities that are permitted within the area/region, and (2) the procedures to apply for uses that are not specified as such. The line may (1) be hard and statutory, meaning it has 'binding legal power' in terms of a/the municipality's land use management system, or (2) be seen as 'soft' or 'fuzzy', meaning that it is not seen as a hard, impenetrable line, but is considered when

planning for, or assessing proposals for land-use change and/or land development within the delineated area.

Ruralisation

The process by which: (1) people choose to remain in rural areas because there are viable economic opportunities, move back to towns and villages in rural areas from urban areas, and/or build/renovate houses in these areas as 'homes' for their current needs, or with a view to retirement; and (2) the State plans for the development of rural areas in a systemic and holistic way as economically viable, ecologically-significant, and productive quality living spaces, as opposed to colonial and Apartheid times in which the little investment that was made in these areas was focused on advancing White economic interests in urban areas, and/or the lives and life chances of White people living in rural towns.

Settlement (also known as 'Human Settlement')

A settlement refers to a place where people live, work, study, play and relax. A settlement can range in size from a small number of dwellings grouped together, to a large city or groups/conglomerations of cities tied together through dense transport and communication networks. Socio-Economic Impact Assessment System (SEIAS) A recently introduced government instrument that seeks to enhance the process of formulating policies,



Acts and regulations by ensuring (1) alignment of such interventions with national priorities, (2) mitigation of risks, (3) anticipation of unintended consequences, and (4) minimisation of costs and maximisation of benefits.

Space Economy

The spatial manifestations and outcomes of the economic interactions and transactions that (1) are generated in a geographic space, (2) take place in that space, and/or (3) flow through that space. The size, nature, scale and scope of the space economy of a place/area is related to (1) its locational, spatial, ecological, economic, social, institutional, infrastructural, mineral, soils and topographical attributes, culture, and history, (2) its level of connectedness to, and relations with other places/areas, and (3) the attributes and space economies of those places it is connected to, or transacts with.

Spatial Planning

The process of making strategic decisions as to: (1) how and for what purpose public, communal and privately-owned land in an area (i.e. a precinct, town, province, country or continent) is to be used and developed in an ecologically responsible, socially acceptable, and financially viable way; (2) how the land portions in the area are to be connected to each other through transport and communication infrastructure, and provided with basic service infrastructure (water,

electricity and sanitation) and social services (education, health, safety and security and welfare); and (3) how the area (precinct, town, province, country or continent) is to be systemically connected to other such areas through transport and communication networks.

Spatial Transformation

The carefully and collaboratively planned and well-managed process of (1) locating infrastructure, (2) providing social services, and (3) allowing, placing and incentivising economic activities in settlements in such a way that the segregated spatial patterns inherited from colonial and Apartheid times are broken down, and the inefficiencies, injustices and inequalities in access to economic and other opportunities resulting from these past patterns are corrected.

Strategic Water Source Areas

Strategic Water Source Areas (SWSAs) can be described as 'water factories' that support growth and development needs that are often a long distance away from these areas. SWSAs contribute significantly to the overall surface and ground water supply of the country. SWSAs were identified and mapped by the Water Research Commission in 2015. Only 13% of the total extent of SWSAs was formally protected in 2017 (Nel et al, 2017).



Stressed Catchments

‘Water stress’ occurs when the amount of water used exceeds 10% of renewable resources. Water stress depends on a range of factors and is not simply a shortfall in water availability in relation to the amount of water National Spatial Development Framework 2022 19 required. Water deficits are not necessarily experienced in the same way in a Water Management Area, nor at all times, nor in the same place over time. In some cases, the deficits do not imply that consumptive use exceeds the available water, but that the allowances made for the implementation of the ecological component of the reserve cannot be fully met at present levels of use. Stressed catchments are also impacted upon by “water demand/requirement”, which refers specifically to the “beneficial, effective and efficient use of water”, which can be improved through, for example, a reduction in water loss.

Supra-National

The term refers to: (1) ‘regions’, organisations and structures that are created ‘above the nation state’ by two or more countries, e.g. the African Union (AU) and the Southern African Development Community (SADC), to attend to matters of mutual concern and/or that lie outside the control/reach of a single country; and/or (2) agreements,

protocols, policies, plans and investment frameworks prepared for these bigger supra-national entities.

Sustainable Development

Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The definition of sustainable development usually includes social, economic, institutional, natural resource, and ecological dimensions/components. Development is only sustainable if the ability of natural systems to provide natural resources and ecosystem services is sustained.

Town

A place (1) where people, economic activities and social services are geographically concentrated in a distinct and identifiable area, (2) that has a legally enshrined form of local/municipal government.

Township

This term has two meanings in the South African context. Firstly, it is a colloquial name given to residential townships which were established during the Colonial and Apartheid Eras for temporary occupation by Black South Africans on the outskirts of towns and cities, and where only the most basic of amenities and infrastructure were provided. During colonial times, these townships were called “locations”, and sometimes still are, albeit increasingly less so. Secondly, it is the legal



name given to new human settlements and extensions to existing settlements in planning legislation, e.g. 'Sunnyside Extension 3', dating back to the first Town Planning Ordinances passed in the early 1900s, and also appearing in the more recent Spatial Planning and Land Use Management Act (2013) (SPLUMA).

Transit-Oriented Development (TOD)

A planned intervention that promotes higher density and mixed-use land development close to significant transit routes that has been developed in accordance with the principles of Universal Design. TODs aim to (1) make the best use of land located along such routes, (2) increase ridership/use of public transport on the routes, and (3) promote sustainable urban development.

Urban Area

Urban areas are spaces/areas characterised by: (1) large and often diverse communities, generally living at high residential densities; (2) a broad mix of employment opportunities, many of them related to the sale, maintenance and repair of goods, and the provision of personal, financial National Spatial Development Framework 2022 20 and social services to those who live in the area; and (3) nodes and precincts with high-intensity retail, business, entertainment, education and government-related facilities and activities, and high-density residential land-uses. Urban Development The process of improving

the quality of life and economic well-being of people living in an urban area by planned interventions in: (1) the ownership, access to, and use of land in the area; (2) the provision, maintenance and upgrading of transport and communication infrastructure, both in the area, and between the area and other urban and rural areas it is systemically connected to; (3) the type and intensity of economic activities in the area; (4) the quantity and quality of social, education, welfare and safety and security services in the area; and (5) the 'presence' and capacity of the State as an institution in the area.

Urban Edge

A line that is used as a border to distinguish between (1) an area/region that is regarded as part of a city or town, and (2) the surrounding natural or rural area. Its primary purpose is to 'contain the urban' by not allowing urban development and/or providing municipal services outside/beyond the line. As in the case of a 'rural edge', the line may (1) be hard and statutory, meaning it has 'binding legal power' in terms of a/the municipality's land use management system, or (2) be seen as 'soft' or 'fuzzy', meaning that it is not seen as a hard, impenetrable line, but is considered when planning for, or assessing proposals for land use change and/or land development within the area.



Urban Region

This term refers to a geographically large and growing, and functionally integrated built-up area that has the same characteristics as an Urban Area.

Urbanisation

The process of migration of people from rural to urban areas, leading to an ever-growing percentage of a country's population being born in its urban vis-à-vis its rural areas.

Water Scarce Regions

This construct refers to: (1) the 'climate capability' of a region, which is a function of the moisture supply, climate constraints, and physiological capacity of a region; and (2) the impact of climatic factors on the capability to grow an agricultural crop in a region within a growing season. For the purposes of the NSDF, areas described as 'Water Scarce Regions' fall within the 'low to low-moderate' climate capability ranges.

Cities and very large regional centres

Population: > 500,000 people; Morphology: Dense urban areas; Economy: Service-related.

Large Regional centres Population:

10,000 – 300,000 people; Morphology: Regional node

Regional centres Population:

< 100,000 people; Morphology: Regional node consisting of interconnected settlements.

Service Towns Population:

15,000 – 100,000 people; Economy: Providing economic and social service anchor role to the hinterland.

Small Service Towns Population:

< 20,000 people; Morphology: Monochrome small town; Local Service role: Playing an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km from the town in sparser areas; Economy: Government and community service.

Rural Service Settlement Population:

Varied in nodal settlement, large population in direct hinterland; Morphology: Emerging nodes of consolidation in Dense Rural Settlements; Local Service role: Strategically located to play an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km from the town in sparser areas.



Small towns Population:

< 20,000 people; Morphology: Monocentric small towns, often apartheid landscape double centre towns; Economy and service role: Primarily serve local population and/or 'niche' economic activity such as mining, tourism or fisheries.

Rural settlement areas and villages This area incorporates both formal rural settlement area as well as Traditional Authority Rural Settlement Area. Both have very small formal service economy activities Sparsely populated rural areas Sparsely populated areas (meso zone areas without rural settlements).