

Ratlou Spatial Development Framework

2020 - 2025



Ratlou Local Municipality



Project sponsor:

Department of Agriculture, Land
Reform and Rural Development
(DALRRD)



Service provider:

Cadre Plan (Pty) Ltd

RATLOU SPATIAL DEVELOPMENT FRAMEWORK

MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK FOR RATLOU LOCAL MUNICIPALITY




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TABLE OF CONTENTS

1 EXECUTIVE SUMMARY	11
2 INTRODUCTION	12
2.1 Purpose of this document	12
2.2 Purpose of this chapter	12
2.3 Location	13
2.4 Why a Spatial Development Framework?	14
2.5 Objectives of the Spatial Development Framework	16
2.5.1 Spatial Planning and Land Use Management Act principles	16
2.5.2 Spatial Land Use Management Act's Municipal Spatial Development Framework objectives	16
2.5.3 Scope of work	17
2.6 Approach to the 2020 - 2025 Ratlou Spatial Development Framework	19
2.6.1 Phases and development	19
2.6.2 Stakeholder engagement	19
3 INSTITUTIONAL, POLICY AND STRATEGY CONTEXT	20
3.1 National	20
3.1.1 State of the Nation Address 2019	20
3.1.2 National Development Plan 2030.....	20
3.1.3 The National Spatial Development Framework (April 2019 - Draft)	21
3.1.4 CSIR Green Book 2019	27
3.1.4.1 Floods	27
3.1.4.2 Wildfires	27
3.1.4.3 Drought	28
3.1.4.4 Municipal and settlement vulnerability	28
3.1.4.5 Urban growth	31
3.1.4.6 Climate change	32
3.1.4.7 Economy	33
3.1.4.8 Agriculture, forestry and fisheries	33
3.1.4.9 Surface water.....	33
3.1.4.10 Groundwater.....	33
3.2 Provincial	34
3.2.1 State of the Province Address, 2019.....	34
3.2.2 North West Provincial Development Plan 2013.....	34
3.2.3 North West Provincial Spatial Development Framework 2017	35
3.3 District40	
3.3.1 District Spatial Development Framework, 2020 – 2025.....	40
3.3.2 District Rural Development Plan, 2016	40
3.4 Local 41	
3.4.1 Ratlou by-law on Spatial Planning and Land Use Management	41
3.4.2 Ratlou Integrated Development plan, 2017 – 2018.....	41
3.4.3 Ratlou Land Use Scheme, 2016.....	41
3.4.4 Ratlou Spatial Development Framework, 2012 – 2017 (review)	42
3.5 Other policies and legislation to take cognisance of	43
4 SPATIAL CHALLENGES AND OPPORTUNITIES	44
4.1 Sources of analysis	44
4.1.1 Data 44	
4.1.2 Maps 44	
4.1.3 Strengths, Weaknesses, Opportunities and Threats determination approach	46
4.2 Fields of analysis	46

4.2.1	Biophysical.....	46
4.2.1.1	Background.....	46
4.2.1.2	Biophysical synthesis map.....	48
4.2.1.3	Synthesis.....	48
4.2.2	Socio-economic.....	56
4.2.2.1	Background.....	56
4.2.2.1	Socio-economic synthesis map.....	59
4.2.2.2	Synthesis.....	59
4.2.3	Built environment.....	67
4.2.3.1	Background.....	67
4.2.3.2	Built environment synthesis map.....	68
4.2.3.3	Synthesis.....	68
4.3	Settlement frameworks (previous SDF).....	78
4.3.1	Setlagole and Madibogo framework.....	78
4.3.2	Disaneng and Mokgobistad framework.....	80
4.3.3	Logageng and Tshidilamolomo framework.....	80
4.3.4	Central region.....	80
4.4	Synthesis and lessons learnt.....	81
4.4.1	Key outcomes.....	81
4.4.2	Matrix and final synthesis graph.....	81
4.4.3	Interrelation of elements.....	82
5	SPATIAL PROPOSALS.....	85
5.1	Vision 85.....	85
5.1.1	Visioning process and process imperatives.....	85
5.1.2	Rationale for vision directives.....	85
5.1.3	Towards specific vision directives.....	86
5.1.4	Traditional authorities in the municipality.....	88
5.1.5	Municipal long-term vision.....	89
5.1.5.1	Long municipal vision.....	89
5.1.5.2	Short municipal vision.....	90
5.2	Spatial concept.....	91
5.2.1	Informing the spatial concept.....	91
5.2.2	Ratlou spatial concept framework.....	95
5.2.3	Setlagole and Madibogo spatial concept framework.....	98
5.2.4	Mareetsane and Batho-Batho area spatial concept framework.....	101
5.2.5	Disaneng and Mokgobistad spatial concept framework.....	103
5.2.6	Logageng and Tshidilamolomo spatial concept framework.....	105
5.3	Spatial strategies.....	107
5.3.1	Settlement structure and hierarchy.....	107
5.3.2	Protected areas.....	109
5.3.3	Critical biodiversity areas.....	110
5.3.4	Tourism areas.....	111
5.3.5	Agricultural focus areas.....	112
5.3.6	Mining areas.....	113
5.3.7	Revitalisation of rural areas.....	114
5.3.8	Service delivery and maintenance.....	115
5.3.9	Catalytic areas.....	116
5.3.10	Movement and connectivity.....	117
5.4	Land Use Budget.....	118
5.5	Spatial Development Framework.....	124
5.5.1	Municipal Spatial Development Framework.....	124
5.5.2	Development plans.....	127
5.5.2.1	Setlagole and Madibogo.....	127
5.5.2.2	Kraaipan.....	131

5.5.2.3	Mareetsane and Batho-Batho	133
5.5.2.4	Mokgobistad and Disaneng.....	135
5.5.2.5	Tshidilamolomo and Logageng.....	137

6	IMPLEMENTATION FRAMEWORK.....	139
6.1	Requirements	139
6.2	Supporting policies	140
6.2.1	Settlement priority policy	140
6.2.2	Municipal conservation, protected and critical areas policy	140
6.2.3	Local tourism policy.....	141
6.2.4	Natural resource utilisation and management policy	141
6.2.5	Rural revitalisation policy	142
6.2.6	Service delivery and maintenance policy	142
6.2.7	Municipal movement and connectivity policy	143
6.3	Supporting guidelines.....	143
6.4	Capital Investment Framework	149
6.5	Key sectoral notions of the SDF	154
	REFERENCES	165

LIST OF TABLES

TABLE 1:	RATLOU KEY MEETINGS	19
TABLE 2:	RATLOU LOCAL MUNICIPALITY VULNERABILITY	28
TABLE 3:	SETTLEMENT VULNERABILITY	29
TABLE 4:	RATLOU POPULATION GROWTH SCENARIOS.....	31
TABLE 5:	POPULATION GROWTH PRESSURE.....	32
TABLE 6:	RATLOU SDF 2012 – 2017 SPATIAL PROPOSALS	42
TABLE 7:	SWOT VALUE DETERMINATION	46
TABLE 8:	MINERAL RESOURCES IN RATLOU LOCAL MUNICIPALITY	48
TABLE 9:	BIOPHYSICAL SWOT SYNTHESIS	53
TABLE 10:	AVERAGE HOUSEHOLD SIZE	56
TABLE 11:	RATLOU HOUSEHOLD GROWTH ESTIMATES.....	57
TABLE 12:	GROWTH IN THE DISTRICT (2016).....	59
TABLE 13:	SOCIO-ECONOMIC SWOT SYNTHESIS	64
TABLE 14:	BUILT ENVIRONMENT SWOT SYNTHESIS	75
TABLE 15:	LAND USE BUDGET FOR RATLOU MUNICIPAL AREA	119
TABLE 16:	LAND USE BUDGET ALLOCATION FOR RATLOU MUNICIPAL AREA	120
TABLE 17:	SOCIAL FACILITY REQUIREMENTS.....	120
TABLE 18:	ADDITIONAL SOCIAL FACILITIES	121
TABLE 19:	ADDITIONAL SOCIAL FACILITIES PER SETTLEMENT	123
TABLE 20:	SETTLEMENT IMPROVEMENT ALLOCATIONS/TYPES	124
TABLE 21:	GUIDELINES FOR IMPLEMENTATION OF SDF	144
TABLE 22:	RATLOU IMPLEMENTATION FRAMEWORK (SETTLEMENT EXPANSION)	149
TABLE 23:	RATLOU SETTLEMENT EXPANSION SUMMARY	151
TABLE 24:	RATLOU IMPLEMENTATION FRAMEWORK (ADDITIONAL SOCIAL FACILITIES)	152
TABLE 25:	KEY SECTORAL NOTIONS (NATIONAL and PROVINCIAL).....	154
TABLE 26:	KEY SECTORAL NOTIONS (LOCAL – DISTRICT and MUNICIPAL).....	158

LIST OF FIGURES

Figure 1: Ratlou locality map	13
Figure 2: SDF in context of strategic government planning system (Cadre Plan, 2019).....	14
Figure 3: IDP and SDF planning process (Cadre Plan, 2018)	15
Figure 4: National Social Service Provisioning Model (DALRRD & DPME, 2019).....	22
Figure 5: Ideal National Spatial Development Pattern to the NSDF sub-frames (DALRRD & DPME, 2019).....	23
Figure 6: Ideal National Spatial Development Pattern (DALRRD & DPME, 2019).....	24
Figure 7: National Spatial Action Areas (DALRRD & DPME, 2019).....	25
Figure 8: North-western Transformation Corridor (DALRRD & DPME, 2019).....	26
Figure 9: Vulnerability index of Ratlou Local Municipality (CSIR, 2019)	29
Figure 10: Ratlou settlement vulnerabilities (CSIR, 2019).....	30
Figure 11: Ratlou Local Municipality Medium- and High-Growth Scenarios (CSIR, 2019) with adaptations.	31
Figure 12: Ratlou settlement growth estimates (CSIR, 2019) with adaptations.....	32
Figure 13: Five strategic objective areas as identified by the PSDF (NWPG, 2017).....	36
Figure 14: North West Provincial Spatial Development Framework (NWPG, 2017)	39
Figure 15: Biophysical synthesis	49
Figure 16: Setlagole and Madibogo biophysical.....	50
Figure 17: Disaneng and Mokgobistad biophysical.....	51
Figure 18: Logageng and Tshidilamolomo biophysical.....	52
Figure 19: Biophysical SWOT	54
Figure 20: Average household size graph (StatsSA, 2011) with Cadre projections	57
Figure 21: Household growth estimates (StatsSA, 2011) with Cadre projections.....	58
Figure 22: Socio-economic synthesis	60
Figure 23: Setlagole and Madibogo socio-economic.....	61
Figure 24: Disaneng & Mokgobistad socio-economic	62
Figure 25: Logageng and Tshidilamolomo socio-economic	63
Figure 26: Socio-economic SWOT	65
Figure 27: Built environment synthesis 3A.....	69
Figure 28: Built environment synthesis 3B	70
Figure 29: Built environment synthesis 3C.....	71
Figure 30: Setlagole and Madibogo built environment	72
Figure 31: Disaneng & Mokgobistad built environment.....	73
Figure 32: Logageng and Tshidilamolomo built environment.....	74
Figure 33: Built environment SWOT	76
Figure 34: Final Synthesis SWOT of Ratlou Local Municipality	83
Figure 35: Interrelation SWOT of Ratlou Local Municipality.....	84
Figure 36: Traditional authority map for NMMDM	88
Figure 37: NSDF - National Spatial Action Area (District) (DALRRD & DPME, 2019).....	92
Figure 38: North West Provincial Spatial Development Framework.....	93
Figure 39: District Conceptual Spatial Framework (modified) (NMMDM, 2019).....	94
Figure 40: Ratlou spatial concept framework.....	97
Figure 41: Setlagole and Madibogo spatial concept framework.....	100
Figure 42: Mareetsane and Batho-Batho spatial concept framework.....	102
Figure 43: Disaneng and Mokgobistad spatial concept framework.....	104
Figure 44: Logageng and Tshidilamolomo spatial concept framework	106
Figure 45: Ratlou Municipal Spatial Development Framework	126
Figure 46: Setlagole and Madibogo Development Plan (Setlagole).....	129
Figure 47: Setlagole and Madibogo Development Plan (Madibogo).....	130
Figure 48: Kraaipan Development Plan.....	132
Figure 49: Mareetsane and Batho-Batho Development Plan.....	134
Figure 50: Mokgobistad and Disaneng Development Plan.....	136
Figure 51: Tshidilamolomo and Logageng Development Plan	138

ACRONYMS AND DEFINITIONS

ACRONYM	DESCRIPTION
CBA	Critical Biodiversity Area
CBD	Central Business District
CSIR	Council for Scientific and Industrial Research
DARD	North West: Department of Agriculture and Rural Development
DALRRD	Department of Agriculture, Land Reform and Rural Development
DLGHS	North West: Department of Local Government and Human Settlements
FET	Further Education and Training
GIS	Graphic Information Systems
GVA	Gross Value Added
IDP	Integrated Development Plan
IGR	Inter-governmental Relations
ISC	Inter-governmental Steering Committee
LSM	Living Standards Measure
MISA	Municipal Infrastructure Support Agent
MLUMS	Municipal Land Use Management System
MSA	Municipal Systems Act, 2000
MSDF	Municipal Spatial Development Framework
NDP	National Development Plan
NMMDM	Ngaka Modiri Molema District Municipality
NGP	New Growth Path
NPC	National Planning Commission
NSDF	National Spatial Development Framework
NWK	Noordwes Koöperasie
PDP	Provincial Development Plan
PPP	Public – Private Partnerships
PSDF	Provincial Spatial Development Framework
RDP	District: Rural Development Plan

SALGA	South African Local Government Association
SDF	Spatial Development Framework
SOE	State-Owned Enterprises
SONA	State of the Nation Address
SOPA	State of the Province Address
SMME	Small, Medium and Micro Enterprises
SPLUMA	Spatial Planning and Land Use Management Act, 2013
SIP	Strategic Infrastructure Project
SWOT	Strengths, Weaknesses, Opportunities and Threats
SWSA	Strategic Water Resource Area

TERM	DEFINITION
Agriculture	Includes extensive agriculture such as rangelands, and intensive agriculture such as cultivation (SANBI, 2016).
Agri-parks	An Agri-park is a networked innovations system of agro-production, processing, logistics, marketing 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.
Agro-processing	Agro-processing is a subset of manufacturing that processes raw materials and intermediate products derived from the agricultural sector. Agro-processing thus means the transforming products that originate from agriculture, forestry and fisheries.
Biodiversity	The diversity of genes, species and ecosystems on Earth, and the ecological and evolutionary processes that maintain this biodiversity (SANBI, 2016).
Biodiversity priority areas	Natural or semi-natural areas in the landscape or seascape that are important for conserving a representative sample of ecosystems and species, for maintaining ecological processes, or for the provision of ecosystem services (SANBI, 2016).
Commercial hub	A commercial hub is an area in which commercial and retail activities are grouped with the aim of benefitting from 'economies of agglomeration'. These are typically located in strategic locations within a settlement or wider region such as along a major road or important intersection.
Conservation	Refers to the management for explicit biodiversity conservation objectives. May or may not include formal protection (SANBI, 2016).
Conservation area	An area of land or sea that is not formally protected in terms of the Protected Areas Act but is nevertheless managed as least partly for biodiversity conservation. Because there is no long-term security associated with conservation areas, they are not considered a strong form of protection. Conservation areas contribute towards the conservation estate but not the protected area estate (SANBI, 2016).
Corridor	A corridor is a linear linkage between two important functional points. Along a corridor the aim is to increase the intensity of development. Corridors provide efficient access to higher levels of economic activity and opportunities. Corridors also typically include public transport in any form and are not limited to only road-based transport.
Critical Biodiversity Area	An area that must be maintained in a good ecological condition (natural or near-natural state) in order to meet biodiversity targets. CBAs collectively meet biodiversity targets for all ecosystem types as well as for species and ecological processes that depend on natural or near-natural habitat, that have not already been met in the protected area network (SANBI, 2016).
Cultivation	A form of intensive agriculture. Includes field crops and horticulture. Includes dryland and irrigated crops. Can be for commercial or subsistence purposes (SANBI, 2016).
In situ	The method to upgrading informal settlements in a manner whereby the majority of people who live in the settlement continue to do so (NUSP, 2019).
Land Use Management System	A system designed to regulate the use of land within a jurisdiction (municipality). It includes a town planning, zoning scheme or policies aimed at guiding how land is utilised on a plot-by-plot basis.
Nature Reserve	Usually managed by provincial conservation authorities OR by private or communal landowners as part of biodiversity stewardship programmes (SANBI, 2016).
Node	A node is an area in which higher intensity of land uses and types are encouraged and supported. Nodes are typically hierarchical with varying orders depending on the location, intensity of activities, size and overall functioning.
Protected area	An area of land or sea that is formally protected in terms of the Protected Areas Act and managed mainly for biodiversity conservation. Includes state-owned protected areas and contract protected areas (SANBI, 2016).
Protection	Refers to formal protection in terms of the Protected Areas Act and involves the establishment of statutory protected areas that are managed primarily for biodiversity conservation purposes, with sustainable use options where appropriate. Implies long-term security (SANBI, 2016).
Rural areas	Rural areas can be defined as spaces outside of urban settlements and can be characterised by a reliance on primary forms of economic activity (agriculture, mining, tourism etc.).
Settlement	A small town or village.
Settlement edge	The transition area/line between rural and settlement uses. This serves as the border for consolidation for formalisation within settlements. Everything located outside should ideally move to within or close to the settlement edge.
Social Housing	Means a rental or co-operative housing option for low- to medium income households at a level of scale and built form which requires institutionalised management. This option is provided by social housing institutions or other delivery agents in approved projects in designated restructuring zones with the benefit of public funding as contemplated in the Social Housing Act.

Spatial form	Spatial form is used to describe the physical layout and dispersion of a settlement or town.
Urban	Urban refers to a built-up area with a large concentration of people (typically more than 5 000) and economic activities. Urban areas are characterised by having developed services and ease of access to services.

1 EXECUTIVE SUMMARY

The development of this Spatial Development Framework has followed a set process that consisted of gaining an in-depth understanding of the policy context in which the municipality exists. Simultaneously, the early vision directives were developed. This was followed by the contextual and spatial analysis of the municipality from a national, provincial, district and local level. Out of this analysis, the spatial challenges and opportunities in the municipality were derived. Following on from this, the next step was to utilise the findings to develop a number of spatial proposals that aimed to be based in reality and still guide change effectively. The final component of the Spatial Development Framework was the development of an implementation framework for the spatial proposals developed prior.

This process is directly reflected in the content of this report in the sections and chapters. The document structure includes Chapter 2: introduction which stipulates the legal and policy applicability of this document. Chapter 3: Institutional, policy and strategy context highlight how the document should fit into an existing structure and what it should take cognisance of. Chapter 4: Spatial challenges and opportunities presents the synopsis of the analysis undertaken of the municipality and the useful outcomes derived from it. The spatial proposals, which comprise chapter 5, present a number of approaches to shaping the future of the municipality through a vision, conceptual approach, strategies, land use budget to a spatial development framework. The final chapter deals with the implementation of chapter 5 over the following decade and responsibilities for carrying it out.

2 INTRODUCTION

2.1 Purpose of this document

The purpose of this document is to provide the Intergovernmental Steering Committee (ISC) with a concise overview of the municipal area in the form of a status quo report, pertaining to spatial challenges and opportunities. This report has been compiled in terms of Section 8(1) of the Ratlou Spatial Planning and Land Use Management By-law which states that the project committee must compile a status quo document setting out an assessment of existing levels of development and development challenges in the municipal areas and must submit it to the ISC for comments. Section 8(2) further states that after consideration of the comments of the ISC, the project committee must finalise the status quo report and submit it to council for adoption.

2.2 Purpose of this chapter

This chapter aims to provide generic information to inform the reader of why a Spatial Development Framework (SDF) should be compiled for the area of jurisdiction of the Ratlou Local Municipality (Ratlou LM). It also describes the process and stakeholder engagement process to be followed in the compilation of the Municipal Spatial Development Framework (MSDF) for the Ratlou LM (Ratlou MSDF or SDF).

2.3 Location

The Ratlou LM is situated in the North West Province of South Africa and forms part of the area of jurisdiction of the Ngaka Modiri Molema District Municipality (Ngaka Modiri DM). The Ratlou LM is located within the eastern-most part of the province. The municipality is home to a section of the Molopo River which makes up the border with Botswana.

The Ratlou LM comprises of a large number of rural settlements, grouped along the border and in the south of the municipality. It is largely rural-based and thus this SDF should enhance this characteristic, but also explore the potential of the area.

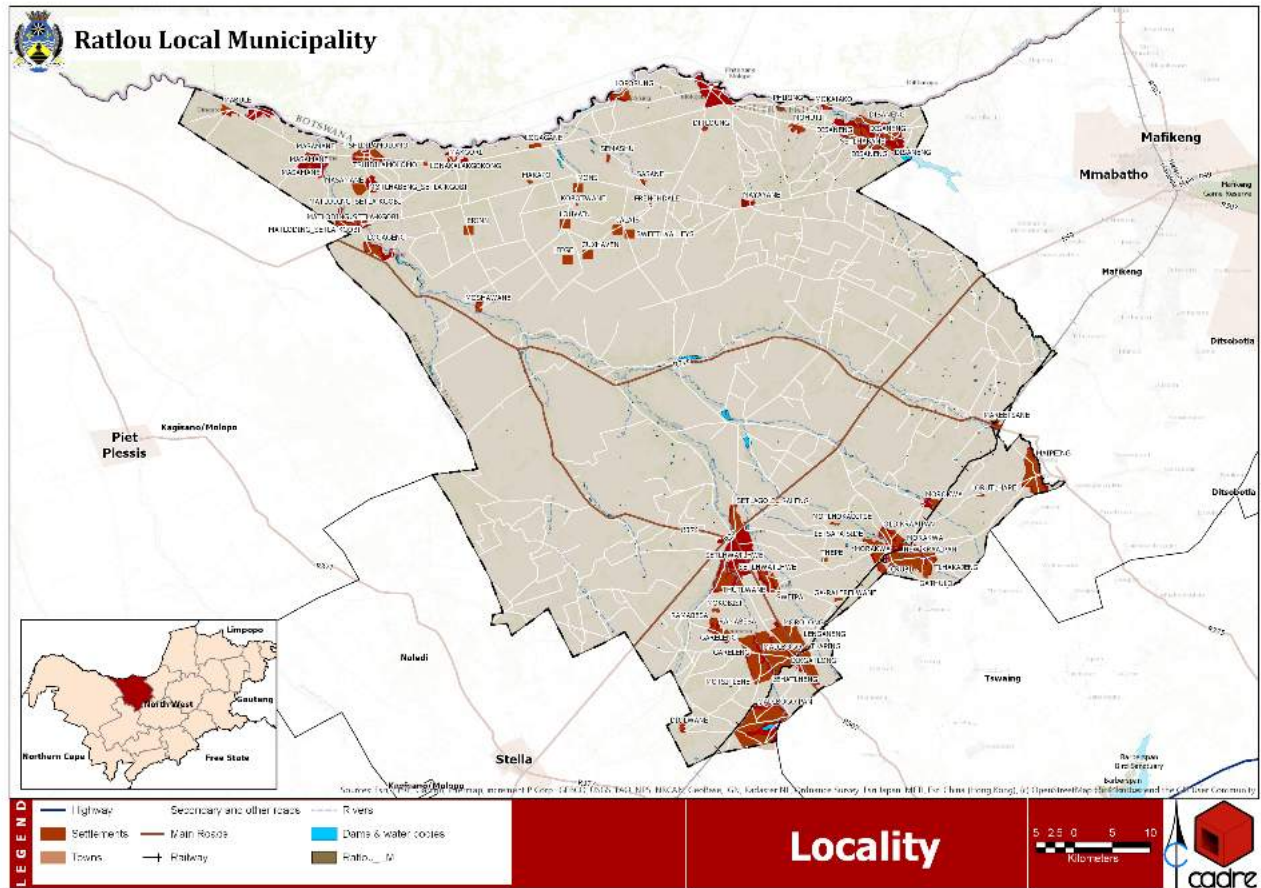


Figure 1: Ratlou locality map

2.4 Why a Spatial Development Framework?

A MSDF or SDF can be defined as a framework that seeks to guide the spatial development of a municipality. It seeks to illustrate the current, but also future spatial view of the municipality. The SDF seeks to support the Integrated Development Plan (IDP) in terms of future spatial planning. The IDP is the budgetary guide for the municipality's spending and determines allocation. The SDF aims to spatially illustrate the IDP in all its detail, such as its vision, objectives, goals and projects in a strategic manner. This important relationship between the IDP and SDF is mirrored in the relationship between the SDF and the Municipal Land Use Management System (MLUMS). In this relationship, the SDF also guides and shapes the land use decisions taken by the municipality, more specifically the Municipal Planning Tribunal (MPT), when approving development and amendments to the MLUMS (Republic of South Africa, 2013).

The IDP and SDF are legally mandated municipal planning tools which are guided by national, provincial and local legislation. The national legislative framework is based on the Local Government: Municipal Systems Act, 2000 (Act No 32 of 2000 (MSA, 2000) and the Spatial Planning and Land Use Management Act, 2013 (Act No 16 of 2013) (SPLUMA, 2013). The Ratlou Municipality was legally obligated to draft a local Spatial Planning and Land Use Management By-law (SPLUMA By-law) which was promulgated in 2016. This SPLUMA By-law provides additional prescriptions for the development of an SDF which are essential to follow. The MSDF, however, is not only based on a legislative framework, but also serves to act as a tool for the implementation of policies. Policies, such as the National Development Plan, 2030 (NDP, 2030), provides a long-term vision of where South Africa aims to be in 2030 with local municipalities being the local sites where this national vision should be effected (DRDLR, 2017).

Figure 2 depicts the SDF in the context of the strategic government planning system (Cadre Plan, 2019).

Spatial Development Framework in context of strategic government planning system

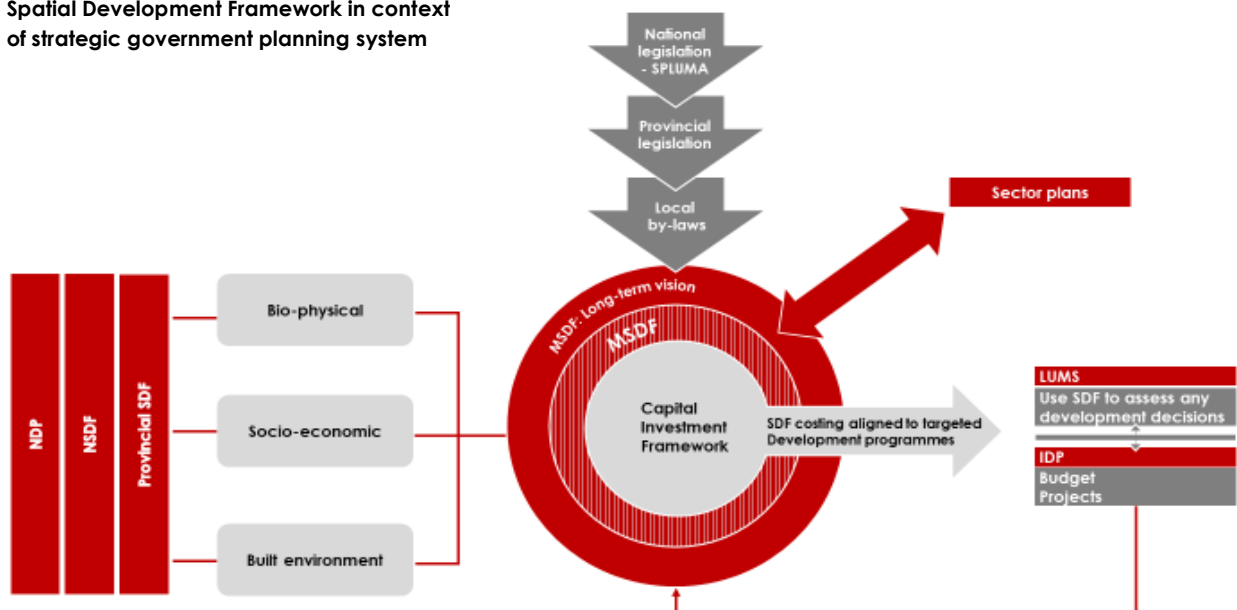


Figure 2: SDF in context of strategic government planning system (Cadre Plan, 2019)

Figure 2 on the next page describes the SDF planning process in tandem with the IDP planning process. The aim is to complete the SDF in December 2019, and to enable integration with the IDP, which will be compiled by IDP Officials and completed in February 2020. The IDP and SDF will be tabled at the Council Meeting in March, 2020 (Cadre Plan, 2018).

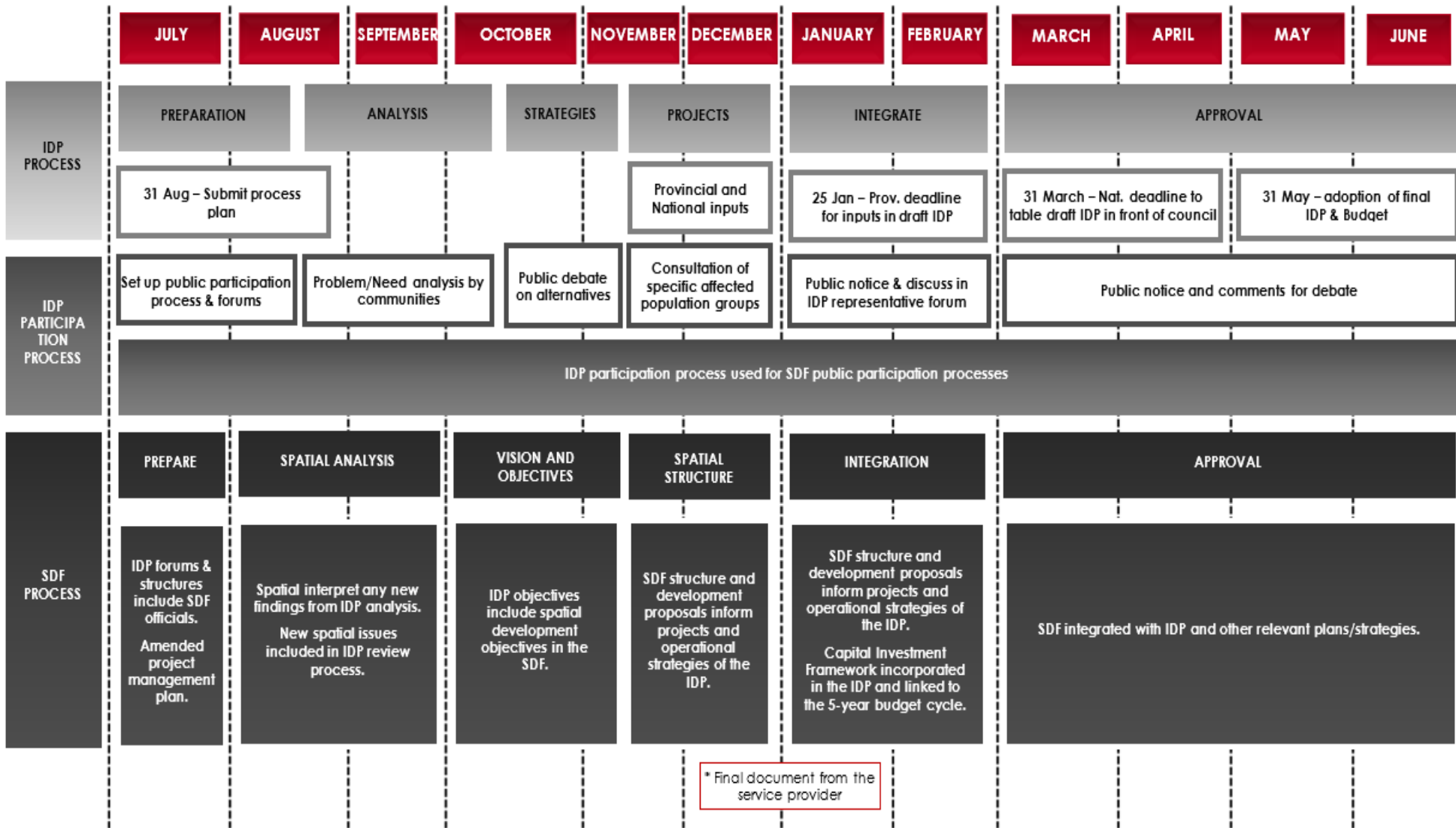


Figure 3: IDP and SDF planning process (Cadre Plan, 2018)

2.5 Objectives of the Spatial Development Framework

2.5.1 Spatial Planning and Land Use Management Act principles

SPLUMA, 2013, guides spatial planning, land use management and development. It is specific, pertaining to the development principles that should be applied to guide planning. As in every other planning process and procedure, these development principles would be applicable in the development of a regional framework. According to SPLUMA, 2013, the principles are applicable to the preparation, adoption and implementation of any spatial development framework, policy or by-law, pertaining to spatial planning and the development or use of land.

The overall guiding components of the SDF are the Section (7) SPLUMA principles which seek to shape, improve and redress municipalities and South Africa. The five SPLUMA principles, as simplified from the Department of Agriculture, Land Reform and Rural Development, hereon referred to as DALRRD, (formerly Rural Development and Land Reform (DRDLR) guidelines) (DRDLR, 2017), are:

1. **Spatial Justice:** past spatial and other development imbalances must be redressed through improved access to and use of, land by disadvantaged communities and persons.
2. **Spatial Sustainability:** spatial planning and land use management systems must promote the principles of socio-economic and environmental sustainability through encouraging the protection of prime and unique agricultural land, promoting land development in locations that are sustainable and limit urban sprawl and considering all current and future costs to all parties involved in the provision of infrastructure and social services so as to ensure the creation of viable communities.
3. **Efficiency:** land development must optimise the use of existing resources and the accompanying infrastructure, while development application procedures and time frames must be efficient and streamlined in order to promote growth and employment.
4. **Spatial Resilience:** securing communities and livelihoods from spatial dimensions of socioeconomic and environmental shocks through mitigation and adaptability that is accommodated by flexibility in spatial plans, policies and land use management systems.
5. **Good Administration:** all spheres of government must ensure an integrated approach to land use and land development and all departments must provide their sector inputs and comply with prescribed requirements during the preparation or amendment of SDFs. This principle is the fulcrum of this framework, largely because implementation of the spatial planning vision and objectives is not only highly dependent on the strong coordinating role of central government, but is also predicated on good governance mechanisms, incorporating meaningful consultations and coordination with a view to achieving the desired outcomes across the various planning spheres and domains.

2.5.2 Spatial Land Use Management Act's Municipal Spatial Development Framework objectives

The objectives of the MSDF are legislated by Section (12) SPLUMA, 2013 (Republic of South Africa, 2013). As such, the following objectives are stated:

- (a) interpret and represent the spatial development vision of the responsible sphere of government and competent authority;
- (b) are informed by a long-term spatial development vision statement and plan;
- (c) represent the integration and trade-off of all relevant sector policies and plans;
- (d) guide planning and development decisions across all sectors of government;

- (e) guide a provincial department or municipality in taking any decision or exercising any discretion in terms of this Act or any other law relating to spatial planning and land use management systems;
- (f) contribute to a coherent, planned approach to spatial development in the national, provincial and municipal spheres;
- (g) provide clear and accessible information to the public and private sector and provide direction for investment purposes;
- (h) include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and landholdings 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;
- (i) address historical spatial imbalances in development;
- (j) identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks;
- (k) 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;
- (l) promote a rational and predictable land development environment to create trust and stimulate investment;
- (m) take cognisance of any environmental management instrument adopted by the relevant environmental management authority;
- (n) give effect to national legislation and policies on mineral resources and sustainable utilisation and protection of agricultural resources; and
- (o) 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.

The preparation of a MSDF is legislated by Section (20) of SPLUMA, 2013 (Republic of South Africa, 2013), which states the following:

- (1) The Municipal Council of a municipality must by notice in the Provincial Gazette adopt a municipal spatial development framework for the municipality.
- (2) The municipal spatial development framework must be prepared as part of a municipality's integrated development plan in accordance with the provisions of the Municipal Systems Act, 2000.
- (3) Before adopting the municipal spatial development, framework contemplated in subsection (1) and any proposed amendments to the municipal spatial development framework, the Municipal Council must: —
 - (a) give notice of the proposed municipal spatial development framework in the Gazette and the media;
 - (b) invite the public to submit written representations in respect of the proposed municipal spatial development framework to the Municipal Council within 60 days after the publication of the notice referred to in paragraph (a); and
 - (c) consider all representations received in respect of the proposed municipal spatial development framework (Republic of South Africa, 2013).

2.5.3 Scope of work

The compilation of the MSDF and its components originated from the requirements set by the DALRRD which include the following:

The primary aim of this project is to develop a new, comprehensive and credible Ratlou LM SDF that will be valid for five (5) years, from 2020 to 2025, in terms of the provisions contained in the Section 26 (e) of the MSA, 2000, which requires municipalities to compile SDFs as a core component of IDPs.

This proposed new SDF will replace the last compiled edition, which will become obsolete and no longer applicable. This SDF, will therefore aim to explicitly bring across the principles of the newly enacted Spatial Planning Land Use Management Act (SPLUMA) No. 16 of 2013, as well as new trends, opportunities and challenges in the area.

The DALRRD additionally detailed the scope of work to include:

1. Development of a spatial vision and objective of the IDP and the whole municipality;
2. Development of a conceptual scenario for envisaged spatial form;
3. Development of a micro-spatial for the core areas;
4. Setting out of objectives that reflect the desired spatial form of the rural municipality;
5. Contain strategies, policies and plans which must:
 - 5.1 Analysis of the opportunities and constraints;
 - 5.2 Delineate the agricultural land that has high potential; Indicate desired patterns of land use within the municipality;
 - 5.3 Identify existing and future land reform project;
 - 5.4 Address the spatial reconstruction of the location and nature of development within the municipality including desired settlement and spatial patterns; and
 - 5.5 Provide strategic guidance in respect of the location and nature of development within the municipality.
6. Set out a basic framework for the development of a land use management system in the municipality;
7. Set out a capital investment framework for the municipality's development programs within a prioritisation matrix (prioritised list of development interventions and spatial locations);
8. Analysis and clarification of how sector departments will implement the SDF;
9. Contain a strategic assessment of the environmental impact of the SDF;
10. Identify programs, interventions and projects for the development of land within the municipality;
11. Be aligned with the SDFs of neighbouring municipalities; and
12. Provide a visual representation of the desired spatial form of the municipality which must:
 - 12.1 Indicate where public and private land development and infrastructure investment should take place;
 - 12.2 Indicate all cross-border issues, challenges and alignment of programmes shared with neighbouring municipalities, provinces and countries;
 - 12.3 Indicate desires or undesired utilisation of space in particular areas;
 - 12.4 Delineate the urban edge in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA, 1998);
 - 12.5 Must identify areas where strategic interventions are required;
 - 12.6 Must indicate areas where priority spending is required; and
 - 12.7 Identify existing and proposed nodal areas for the development of infrastructure and social services.

2.6 Approach to the 2020 - 2025 Ratlou Spatial Development Framework

2.6.1 Phases and development

The development of the 2020 - 2025 Ratlou MSDF was initiated in May 2019. The development of the MSDF followed a process that originated in the DALRRD (former DRDLR) Guidelines, 2017, for the development of SDFs. The process for the development of the MSDF also complies with the relevant local, provincial and national legislation.

The Ratlou MSDF development process include the following phases:

- Phase 0: Preparatory;
- Phase 1: Policy Context and Vision Directives;
- Phase 2: Spatial Challenges and Opportunities;
- Phase 3: Spatial Proposals;
- Phase 4: Implementation Framework; and
- Phase 5: Final SDF.

2.6.2 Stakeholder engagement

The stakeholder engagement process involves the engagement of a number of interested parties, organisations and community members who make up the Ratlou LM. The stakeholder engagement process began with, as per the Ratlou SPLUMA By-law, 2016, with the publication of a notice of intent to develop the MSDF, dated 27 June 2019.

A wide range of interested and affected parties form part of the ISC and the participation process will also involve the IDP Representative Forum which also includes ward councillors and other stakeholders.

The following meetings will occur and have occurred as part of the SDF development process:

TABLE 1: RATLOU KEY MEETINGS		
TARGET AUDIENCE/ STAKEHOLDER	PURPOSE	DATE OF THE MEETING
Intergovernmental Steering Committee	Inception Report	Wednesday, 29 May, 2019
Intergovernmental Steering Committee	Policy Context and Vision	Tuesday, 2 July 2019, 10am
Intergovernmental Steering Committee	Spatial Challenges and Opportunities	Tuesday, 27 August 2019, 10am
Intergovernmental Steering Committee	Spatial Proposals	Tuesday, 1 October 2019, 10am
Intergovernmental Steering Committee	Implementation Framework	Wednesday, 4 December 2019, 10am
Council ¹	Adoption of the Revised SDF	2020

¹ Not included in the responsibilities of Cadre to do final presentation to Council and prepare item for adoption.

3 INSTITUTIONAL, POLICY AND STRATEGY CONTEXT

This section provides an overview of strategies and policies that provide direction to the Ratlou SDF.

3.1 National

3.1.1 State of the Nation Address 2019

In his, 2019 State of the Nation Address, President Cyril Ramaphosa suggested that government agree on five fundamental **goals** for the next decade, namely:

1. No person in South Africa will go hungry;
2. Our economy will grow at a much faster rate than our population;
3. Two million more young people will be in employment;
4. Our schools will have better educational outcomes and every 10-year-old will be able to read for meaning; and
5. Violent crime will be halved.

Announcing the seven bold **priorities**, the President specifically emphasised:

1. Economic transformation and job creation;
2. Education, skills and health;
3. Consolidating the social wage through reliable and quality basic services;
4. Spatial integration, human settlements and local government;
5. Social cohesion and safe communities;
6. A capable, ethical and developmental state; and
7. A better Africa and world.

3.1.2 National Development Plan 2030

National government is clearly focussed on the National Development Plan, 2030 (NDP, 2030) that was developed by the National Planning Commission (NPC) in the Office of the President in 2012. The NDP, 2030, sets out an integrated strategy for accelerating growth, eliminating poverty and reducing inequality by 2030. The NDP, 2030, supported by the New Growth Path (NGP) and other relevant programmes, provides a platform to look beyond the current constraints to the transformation imperatives over the next 20 to 30 years.

The 2030 goals are to eliminate income poverty and reduce inequality. The NDP's human settlement targets, as set out in Chapter 8, focuses on transforming human settlements and the national space economy and include the following: more people living closer to their places of work; better quality public transport; and more jobs in proximity to townships. To achieve these targets, the NDP advocates strong measures to prevent further development of housing in marginal places, increased urban densities to support public transport, incentivising economic activity in and adjacent to townships and engaging the private sector in the gap housing market.

Other goals relevant to achieving the desired spatial form and a more viable space-economy are:

1. Building of safer communities through developing community safety centres to prevent crime; and
2. Improvement of education, training and innovation through strengthening youth service programmes and introducing new, community-based programmes to offer young people life skills training, as well as entrepreneurship training and opportunities to participate in community development programmes while expanding the number of Further Education and Training (FET) colleges.

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 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.

Chapter 8, which focuses on South Africa's spatial planning system, requires that (Republic of South Africa, 2012):

- All municipal and provincial SDFs are translated into *“spatial contracts that are binding across national, provincial and local governments”*;
- The current planning system should *“actively support the development of plans that cross municipal and even provincial boundaries”*, especially to deal with biodiversity protection, climate-change adaptation, tourism and transportation; and
- Every municipality should have an *“explicit spatial restructuring strategy”* which must include the identification of *“priority precincts for spatial restructuring”*.

3.1.3 The National Spatial Development Framework (April 2019 - Draft)

The National Spatial Development Framework (NSDF) (DALRRD & DPME, 2019) ,as a framework, is based to a large extent on the NDP. In the NDP an important component was the proposed National Scheme for Spatial Targeting. It highlighted six important spatial features to consider, namely; National Competitive Corridors, Nodes of Competitiveness, Rural Restructuring Zones, Resource Critical Regions, Special Intervention Zones and Transnational Development Corridors (DALRRD & DPME, 2019, p. 29).

The NSDF in turn aims to achieve the following five national spatial outcomes:

- A network of national urban nodes, regional development anchors, and development corridors that enable South Africa to derive maximum benefit from urbanisation and urban life;
- National corridors enable sustainable and transformative national development, urbanisation, urban consolidation, mutually beneficial urban and rural linkages, and ecological management;
- National connectivity and movement infrastructure systems are strategically located, extended and maintained, to support an inclusive space economy and key national and regional gateways;
- Productive Rural Regions, supported through sustainable resource economies and regional development anchors, enhance resilience in rural areas, to enable access to the dividends of urban consolidation, rural innovation and climate adaption; and
- National ecological infrastructure and the national resource foundation is well-protected and managed, to enable sustainable and just access to water and other natural resources, both for current and future generations.

In the preparation and development process of the NSDF several spheres and areas were considered. The current state of the entirety of the country was examined (as of 2018), as well as the projected state in 2050. As part of understanding the country, the NSDF categorised places into spatial categories and this was utilised

throughout the analysis, proposals and implementation. In line with this, the NSDF presented the following with regards to Ratlou. Ratlou LM features a rural service centre and small town (Setlagole), two areas of dense and scattered rural settlements (Madibogo and Disaneng) and sparsely populated areas in the remainder (DALRRD & DPME, 2019, p. 46). This organisation of settlements and spatial areas aids in determining social services provision and allocations needed is different social service nodes (refer to **Figure 4: National Social Service Provisioning Model**) (DALRRD & DPME, 2019).

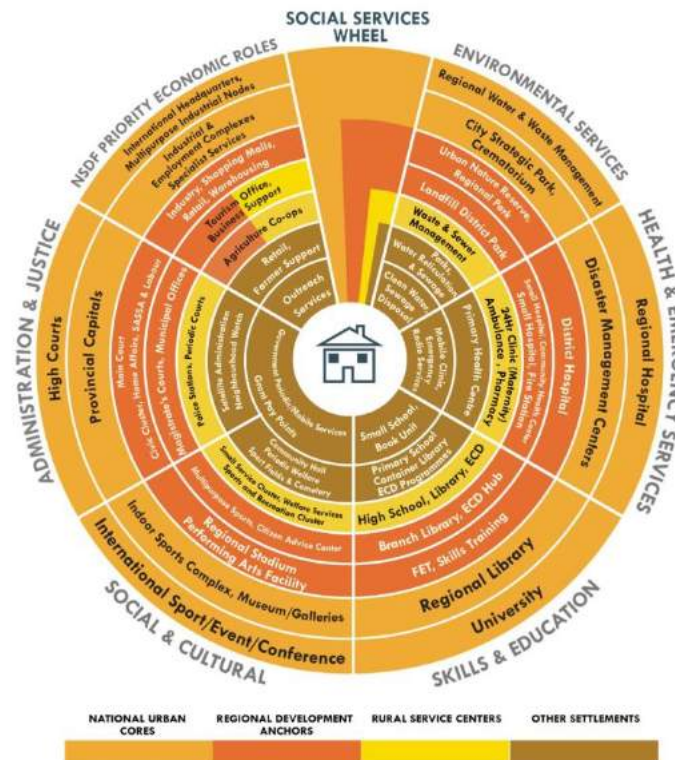


Figure 4: National Social Service Provisioning Model (DALRRD & DPME, 2019)

The NSDF utilised five sub-frames to produce an ideal National Spatial Development Pattern (refer to **Figure 5: Ideal National Spatial Development Pattern to the NSDF sub-frames** and **Figure 6: Ideal National Spatial Development Pattern**). The supra-national framing as the first sub-frame, in short, aims to illustrate the current and future relationships between Southern African Development Community (SADC) nations in four areas, namely:

1. Energy supply;
2. Transport and logistics;
3. Shared water resources; and
4. Ecological infrastructure.

It is important to take cognisance of this, due to Ratlou's close proximity to both a road (N4) and rail inter-regional corridor that runs from Gauteng, through the North West into Botswana and beyond.

The second sub-frame (National Urban Network) focuses on urban and rural settlements and interactions. In this focus area, the settlements of Setlagole and Madibogo have been identified as a smaller town and Rural Services Centre respectively. A smaller town in the NSDF is seen as a place that needs to consolidate services and cooperate more with other towns and larger centres to ensure improved services and development.

A Rural Service Centre are places that should connect smaller towns and settlements together (i.e. Setlagole). They should, ideally, function as a trade post for rural goods and services.

The third sub-frame (National Resource Production Regions) focuses on important natural resource regions. Ratlou LM is unique in its classification and grouping, according to this sub-frame. The NSDF categorises Ratlou into three natural resource regions. The first is that of the National Resource Production Heartland; this implies that it holds high value agricultural land which needs to be protected and managed effectively. In addition to this, Ratlou is also covered by the National Eco-Resource Production Region. This region is largely characterised by enhancing protection and conservation of rural spaces. The final region type is the National Arid-Agri Innovation Region, this region requires a high level of innovation when agriculture is considered to cope with climate change and other forms of environmental stresses.

The fourth sub-frame (National Connecting and Movement Infrastructure) focuses on movement, transport and connectivity both internally and externally in South Africa. Ratlou LM is, too a large extent, not covered in this sub-frame. It is, however, close to Key National Roads such as the N14 and N4. Additionally, it is in close proximity to two important import/export nodes and border posts to the north, a feature that is important for cross-border and regional trade.

The fifth and final sub-frame (National Ecological Infrastructure and National Resource Base) is based on protected areas, ecologically important areas and water systems. In this sub-frame, a small portion of Ratlou LM lies within a National Ecological and Biodiversity Management Area. This area indicates Critical Biodiversity Areas (CBAs) and Strategic Water Source Areas (SWSAs). It additionally aims to preserve and encourage the restoration of natural spaces and systems while simultaneously benefiting rural communities and livelihoods.

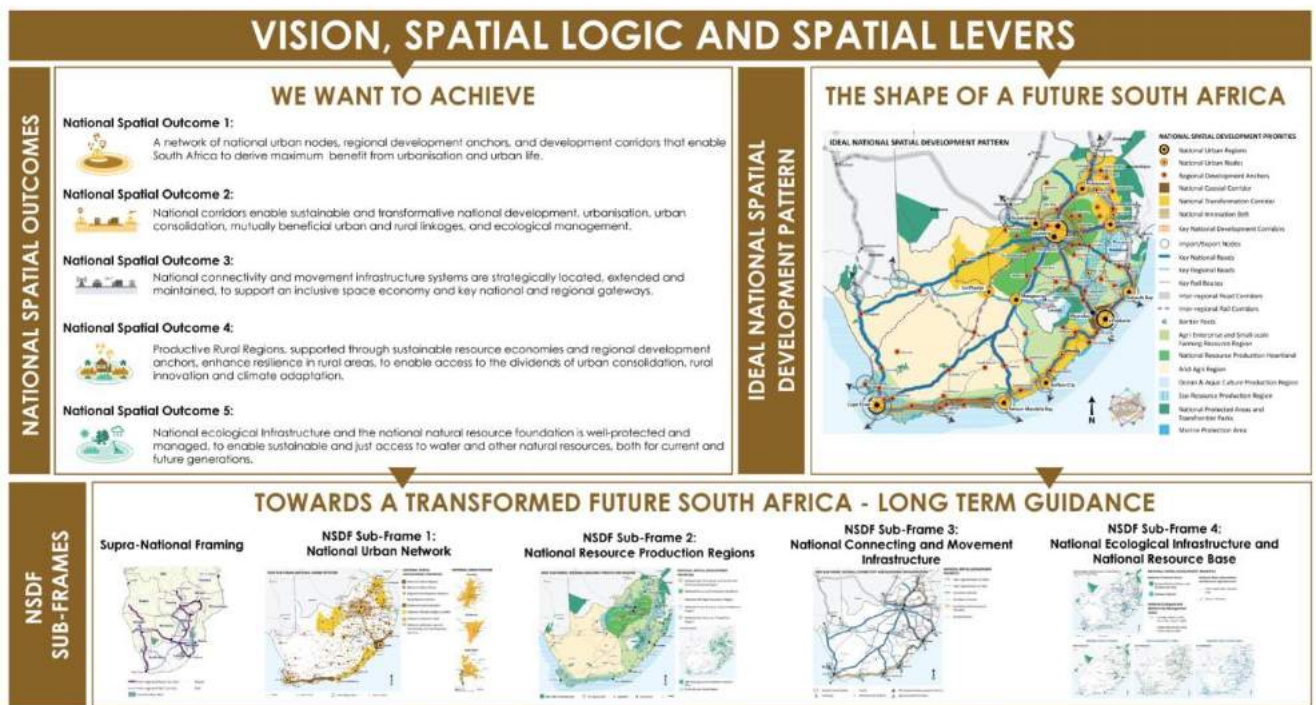


Figure 5: Ideal National Spatial Development Pattern to the NSDF sub-frames (DALRRD & DPME, 2019)

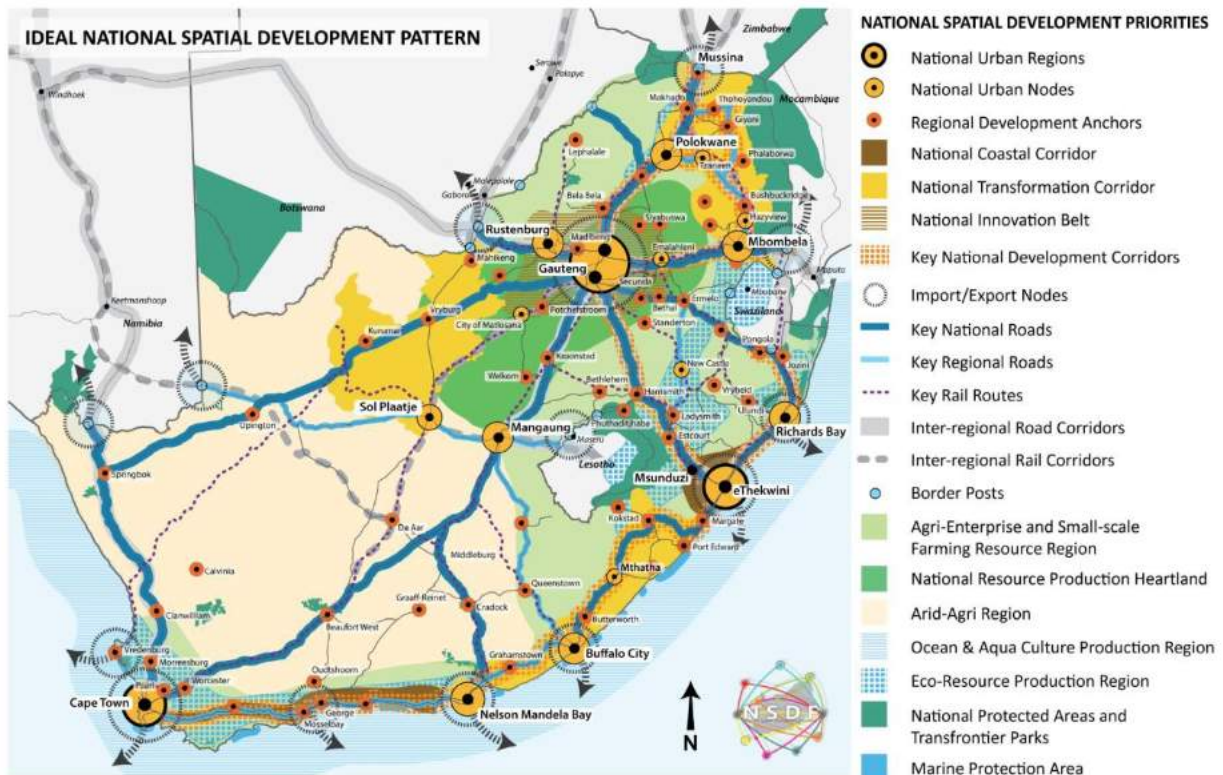


Figure 6: Ideal National Spatial Development Pattern (DALRRD & DPME, 2019)

In collating and aligning all the findings of the five sub-frames, the NSDF proposes an *Ideal National Spatial Development Pattern* (refer to **Figure 6: Ideal National Spatial Development Pattern**). This pattern places Ratlou LM within a National Transformation Corridor. This implies that the municipality is placed to receive sustainable and transformative national development, some level of increased urbanisation, urban consolidation, improved rural and urban connections and greater ecological management. Lichtenburg, Vryburg and Mahikeng (Regional Development Anchors) are seen as essential to this success and realisation (DALRRD & DPME, 2019).

Based on the analysis and desired long-term spatial form for South Africa, the NSDF has identified a number of targeted intervention areas (refer to **Figure 7: National Spatial Action Areas**). As mentioned, Ratlou lies within one of the three National Transformation Corridors – North Western Transformation Corridor. This corridor type is characterised by:

1. Large, youthful populations;
2. Shared histories of deep deprivation and neglect as former apartheid Bantustans;
3. High levels of poverty and unemployment; and
4. Dense sprawling rural settlement forms.

North-western Transformation Corridor, as shown in **Figure 8: North-western Transformation Corridor**, displays the importance of the Madibogo and Setlagole to the greater corridor area. Additionally, it shows the connections and linkages, both in terms of movement and regions types as described in the sub-frame's discussion prior (DALRRD & DPME, 2019).

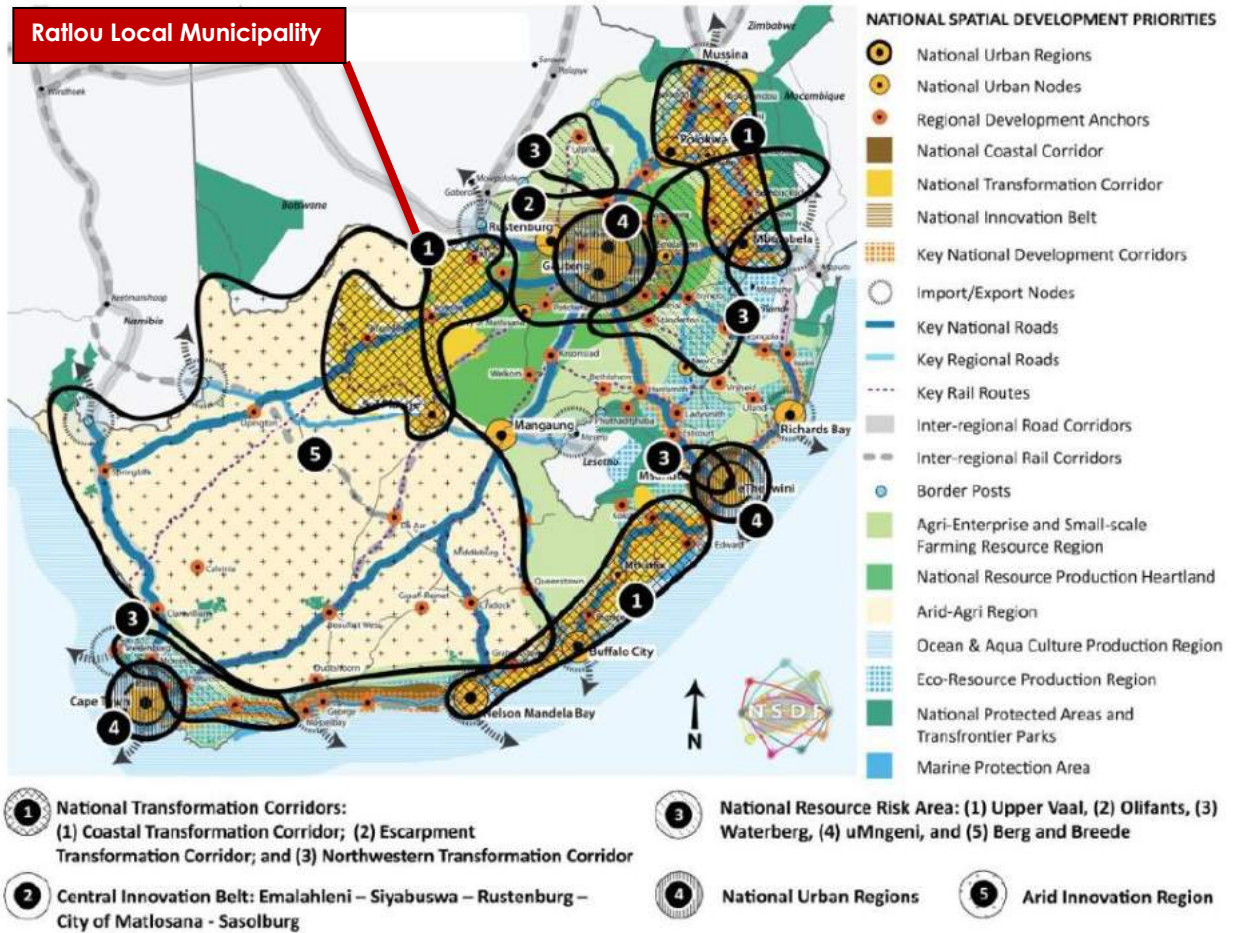


Figure 7: National Spatial Action Areas (DALRRD & DPME, 2019)



Figure 8: North-western Transformation Corridor (DALRRD & DPME, 2019)

3.1.4 CSIR Green Book 2019

In addition to the above national policies, it is similarly important also to note the content and development directions and implications as presented in the newly launched Green Book (2019). Unlike the national policies, the so-called Green Book is an online planning support tool that provides quantitative scientific evidence on the likely impact that climate change and urbanisation will have on South Africa's cities and towns, as well as presenting a number of adaptation actions that can be implemented by local government to support climate resilient development. The Green Book is a research project development by the Council for Scientific and Industrial Research (CSIR) and consists of six workstreams where specific scientific evidence was developed and peer reviewed. The six workstreams are:

1. Downscaling climate change projections across the country to 8 x 8 km grids;
2. Profiling the vulnerability of all local municipalities, settlements and neighbourhoods and predicting the population growth and decline of these areas;
3. Assessing the impact of climate change on the intensity and magnitude of wildfires, coastal flooding, flooding, and drought; as well as the likely impacts on resources such as groundwater availability surface water availability agricultural production and the economy;
4. Developing temporally dynamic composite risk profiles for all municipalities and their settlements;
5. Developing a typology of adaptation actions relevant to local government planning functions and climate risks; and
6. Developing a web-based platform where all evidence and supporting outputs can be accessed.

3.1.4.1 Floods

Flooding in South Africa has always been prevalent and has ranged in level from minor to national scale disasters. Flooding, as an occurrence, is generally broken down into two sub-components, namely:

- Flood hazard; and
- Flood vulnerability.

Flood hazards focuses on the nature of the flood events and includes the likelihood and the severity of flood events. Land flooding, such as where the municipality lies, are caused by large volumes of water which are generated by rainfall events. Rainfall events cause flooding inland in a number of ways including:

- Very intense, short duration rainfall events which rapidly saturate or exceed the ability of soils to absorb the water. This results in short duration flash floods;
- Longer, less intense rainfall events, or a sequence of events which also saturate catchments and can result in long duration floods; or
- Groundwater table rises in response to rainfall recharge.

Flood vulnerability which focuses on the effects of flood events on people, their livelihoods and infrastructure, and includes the degree of exposure, alternatively the magnitude of the consequences, and the resources available for them to recover from the flood. Flood vulnerability is related to the physical (catchment areas etc.) and assets (personal belongings and people) impact and consequences that a flood will have for a given settlement of situation (CSIR, 2019). The flood hazard is expected to decrease as a result of the changing climate and the municipality will become a low to medium flood hazard area (CSIR, 2019).

3.1.4.2 Wildfires

In South Africa there is a fine line between the necessity for wildfires to keep natural ecosystems in the best health and the risk and damaging potential they pose to human activities and lives. With climate change, the risk posed by wildfires will only increase due to increased air temperatures, increased periods between rainfall events which thus lead to increased fire-danger days and more wildfires.

Wildfires are influenced by two sub-categories, namely:

- Fire hazard; and
- Fire vulnerability.

Fire hazard refers to the nature and types of fuels that are available to burn and the typical weather conditions during which fires occur (CSIR, 2019). The municipality lies within an area which are susceptible to wildfires but are needed for ecological health. However, the management of these spaces around human settlements is needed to prevent damage (CSIR, 2019).

Fire vulnerability involves the assessment of various conditions such as:

- Identifying the conditions that increase the likelihood of loss of particular elements at risk such as environmental (ecologically sensitive ecosystems, etc.), social (human lives, livelihoods, etc.), and economic (infrastructure, structures, agriculture, etc.) elements that are exposed to a hazard, and are at risk of loss.
- Determining the vulnerability level for different situations and conditions (CSIR, 2019).

3.1.4.3 Drought

The risk of drought in South Africa is of heightening concern, given the recent four years, specifically with regards to the summer of 2015/16 which was associated with the most intense El Niño event ever recorded. This period saw increased temperatures, decreased rainfall and subsequent water shortages and restrictions. This type of environmental stress is expected to become more and more common due to climate change (CSIR, 2019).

The impact of a drier climate, increased temperatures and decreased rainfall events will lead to a number of changes. Energy demand (comfort within buildings – aircon use will increase), agriculture (reductions of yield in the maize crop under higher temperatures and reduced soil moisture), livestock production (higher cattle mortality as a result of oppressive temperatures) and water security (through reduced rainfall and enhanced evaporation) will all be impacted severely (CSIR, 2019).

3.1.4.4 Municipal and settlement vulnerability

Settlement vulnerability is about determining and profiling neighbourhoods, towns and municipalities according to their social, economic, physical, environmental vulnerabilities as well as the mechanisms in place to make these places more resilient.

On a municipal level, the analysis and determination of vulnerability focused on a number of fields:

1. Socio-Economic Vulnerability Index (SEV);
2. Physical Vulnerability Index (PV);
3. Economic Vulnerability Index (EVI); and
4. Environmental Vulnerability Index (EV).

These indices are valued on a scale of 1 (being not vulnerable) to 10 (very vulnerable).

TABLE 2: RATLOU LOCAL MUNICIPALITY VULNERABILITY

Measurement	Socio-Economic Vulnerability Index (SEV)	Economic Vulnerability Index (EVI)	Physical Vulnerability Index (PV)	Environmental Vulnerability Index (EV)
Vulnerability Index	7.6	7.3	6.1	2.1
National Ranking (out of 213)	176	177	124	26
Average overall ranking (out of 213)				126

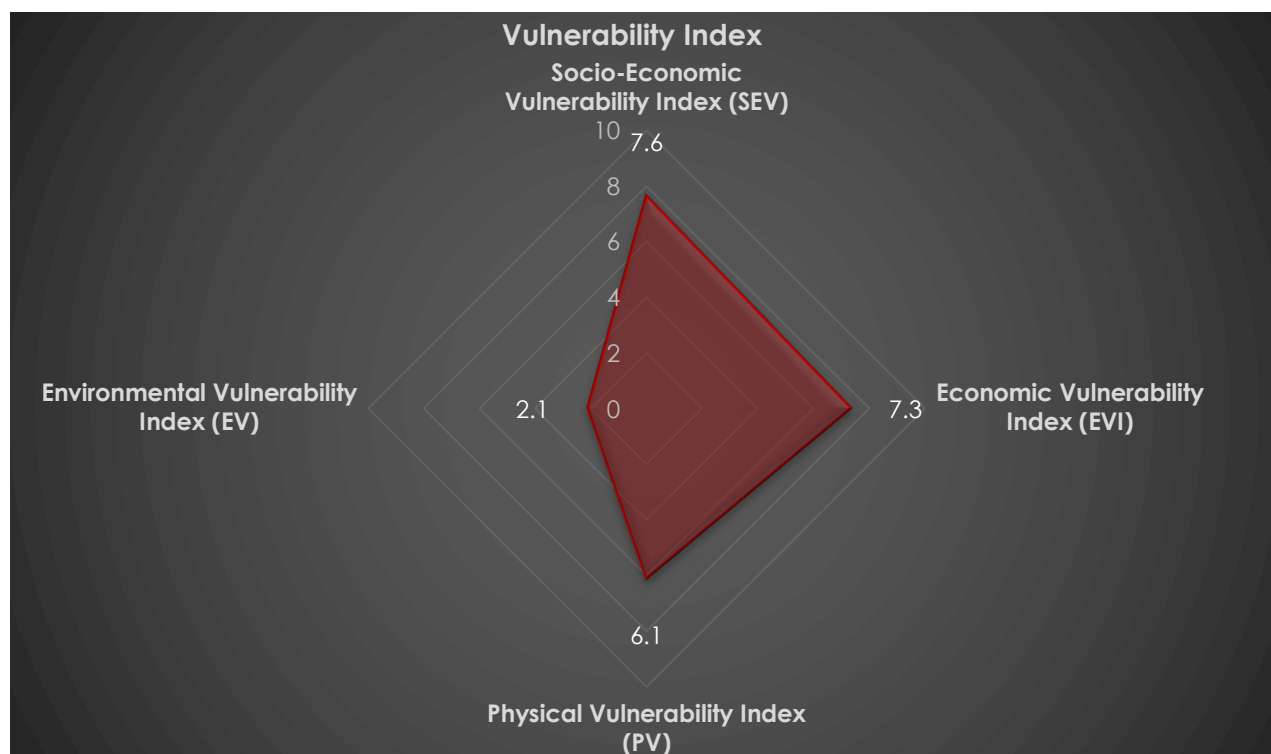


Figure 9: Vulnerability index of Ratlou Local Municipality (CSIR, 2019)

On a town and settlement level, the analysis and determination of vulnerability focused on the following fields in major settlements and towns across each municipality:

1. Socio-Economic Vulnerability Index (SEV);
2. Growth Pressure Vulnerability Index (GPV);
3. Service Access Vulnerability Index (SAV);
4. Economic Vulnerability Index (EVI);
5. Regional Economic Connectivity Vulnerability Index (RECV);
6. Environmental Vulnerability Index (EV); and
7. Agriculture, Forestry, Fisheries Economic Dependency and Vulnerability Index (EVI).

TABLE 3: SETTLEMENT VULNERABILITY

Town	Socio-Economic Vulnerability Index (SEV)	Environmental Vulnerability Index (EV)	Regional economic connectivity (RECV)	Economic Vulnerability Index (EVI)	Service Access vulnerability (SAV)	Growth-pressure vulnerability (GPV)
Madibogo	3.3	10.0	3.7	7.1	1.3	1.0
Setlagole	4.5	9.4	2.3	6.0	10.0	1.0
Disaneng	7.6	1.0	1.0	1.0	4.9	1.0
(Mokgobistad) Phitshane	1.0	9.2	7.3	10.0	1.0	10.0
Remaining Villages (85.6%)	10.0	6.4	10.0	1.0	3.0	1.0

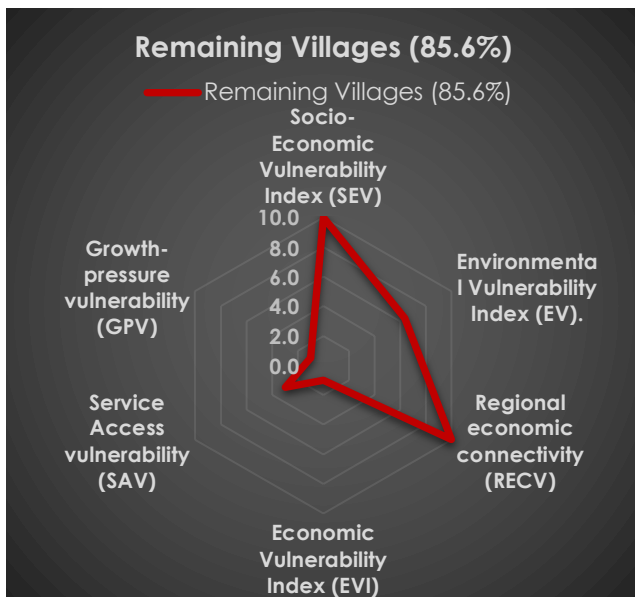
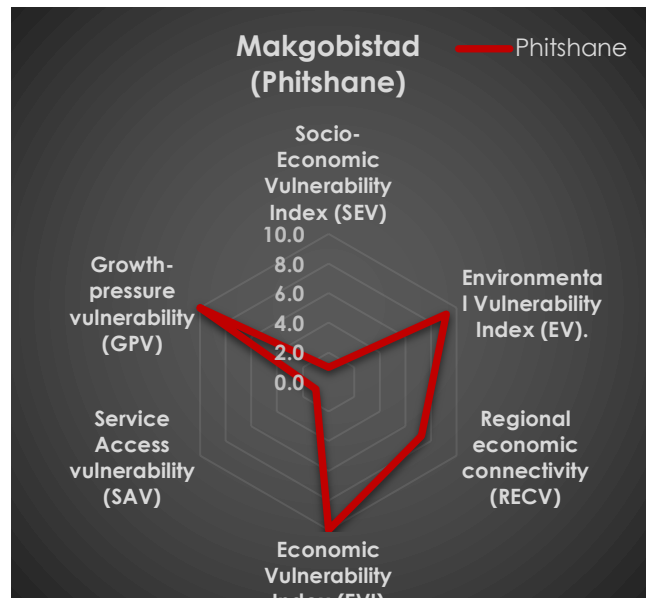
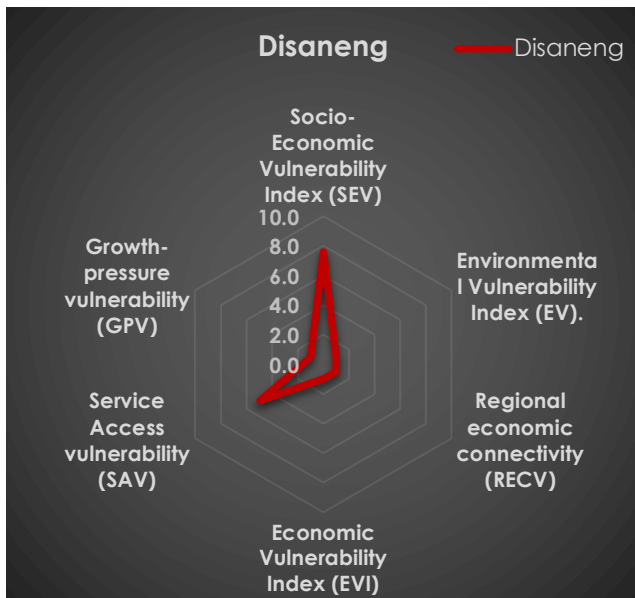
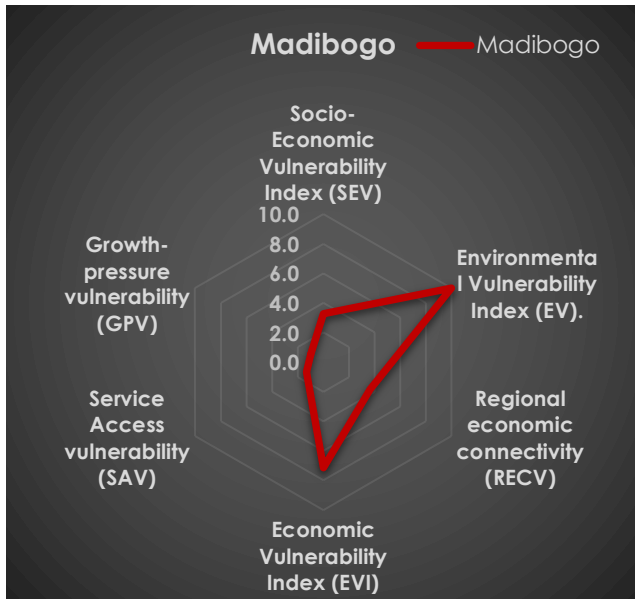


Figure 10: Ratlou settlement vulnerabilities (CSIR, 2019)

3.1.4.5 Urban growth

Urban growth refers to the potential growth and development trajectories of towns and settlements within municipalities. It attempts to determine the future growth and decline of settlements across South Africa to relate these directly to the changes that are projected to occur due to climate change.

Growth estimates for the entirety of the municipality were also developed. These estimates are based around 2011 Statistics South Africa data and then estimated forward to 2030 and 2050 respectively. Additionally, two growth scenarios were developed, a medium and high growth scenario. The medium-growth scenario indicates population estimates if South Africa experiences medium levels of urban migration towards major towns and urban regions. The high-growth scenario indicates population estimates if South Africa experiences high levels of urban migration towards major towns and urban regions. A high growth scenario will result in increased populations within towns and settlements with an increased rural migration to these places as well as towards larger urban centres outside of the municipality.

TABLE 4: RATLOU POPULATION GROWTH SCENARIOS

Pressure	2011	2016	2025	2030	2050
Medium growth scenario	107 315	106 108	119 737	124 173	118 788
High growth scenario	107 315	106 108	112 965	114 983	106 550

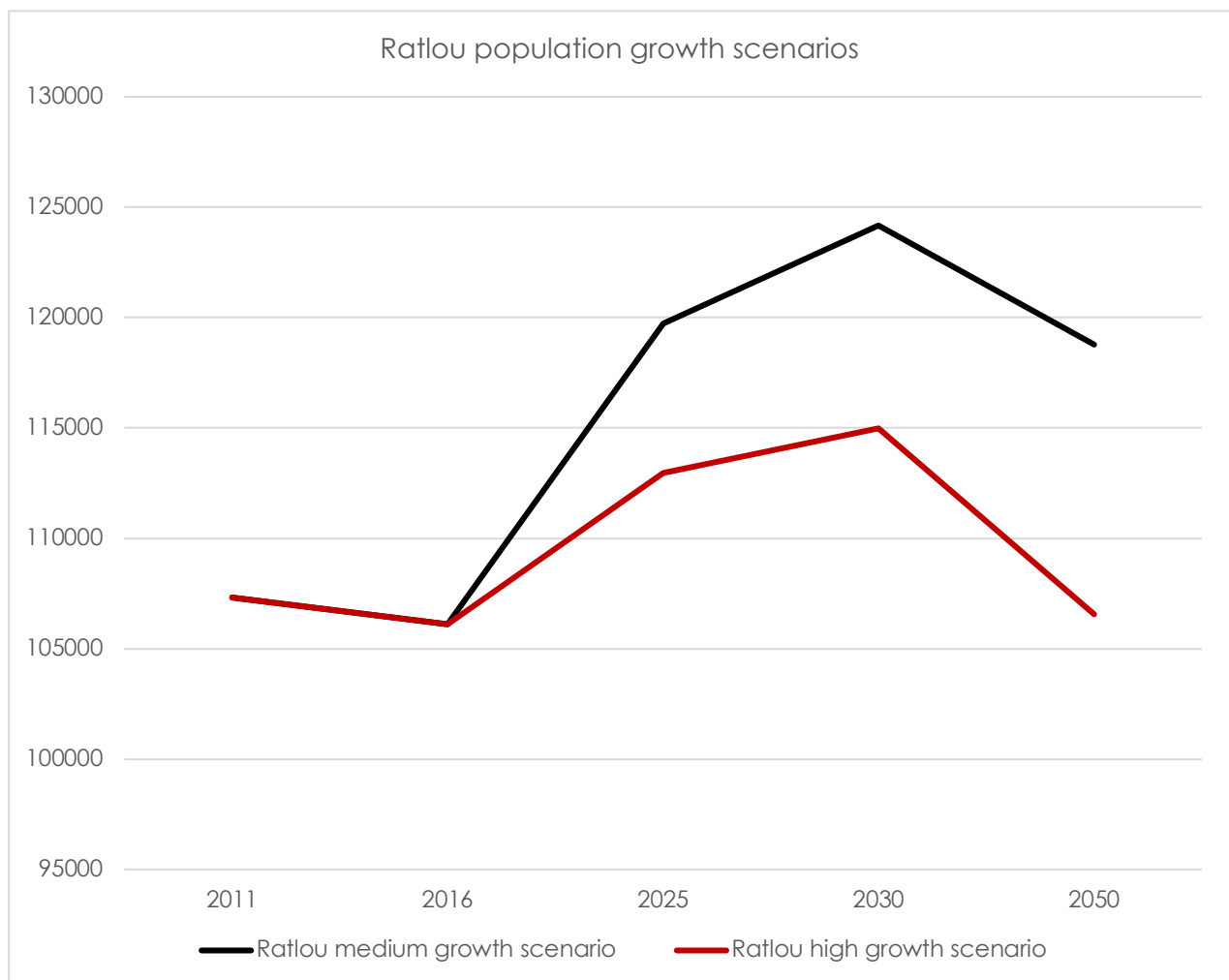


Figure 11: Ratlou Local Municipality Medium- and High-Growth Scenarios (CSIR, 2019) with adaptations.

Additionally, with the population estimates for the entirety of the municipality, place-based population estimates (growth pressure) are also provided for main towns and settlements within the municipality. This is done to show the pressure that will be placed on towns and settlements due to population growth.

TABLE 5: POPULATION GROWTH PRESSURE

TOWN	PRESSURE	2011	2025	2030	2050
Madibogo	Medium	2 501	2 763	2 857	2 744
Setlagole	Medium	7 463	8 208	8 474	8 151
Logageng	No change	863	932	956	926
Disaneng	No change	231	231	231	231
Mokgobistad (Phitshane)	No change	1 054	1 054	1 054	1 054

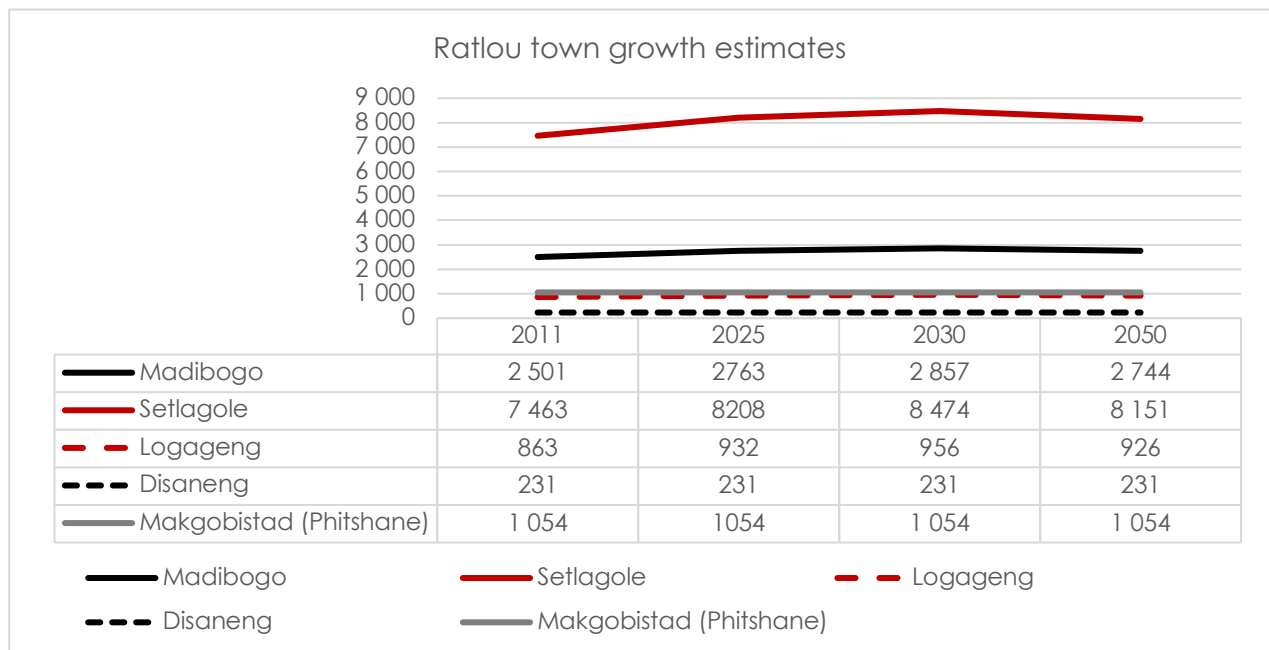


Figure 12: Ratlou settlement growth estimates (CSIR, 2019) with adaptations

3.1.4.6 Climate change

Climate change is projected to drastically impact South Africa if not mitigated. Temperatures are expected to increase at 1.5 to 2 times the global average. The nation and wider region are expected to become far drier than present. These, and a number of other changes will plausibly have a range of impacts on the environment and economy, including energy demand (cooling), water security (less rainfall and more evaporation) and agriculture (changes in crop yields). In addition to these changes, climate change will also lead to longer dry spells with intense thunderstorms (CSIR, 2019).

3.1.4.7 Economy

The impact of climate change on the economy of the nation as a whole is already underway. The costs of floods and droughts has been already high and is expected to increase.

Specific attention is given to the significant impact of climate change on agriculture, access to fresh water, migration, tourism and other areas. With specific reference to agriculture, the link between the economy of a local area and climate change is evident. An example is provided from Pakistan in which a local area's agriculture sector was decimated by a rapidly changing environment as a result of climate change.

Additionally, the impact of climate change on poorer and rural communities is often higher than on richer, more well-established areas. This implies that poorer communities, which are more reliant on primary economic sectors for income, are more susceptible to the change or collapse of these already vulnerable sectors. Results of this are often a reduction in agricultural and industrial output, decreased aggregate investment and increased political instability (CSIR, 2019).

3.1.4.8 Agriculture, forestry and fisheries

"The primary sector of an economy utilises the natural resource base directly for revenue generation, whilst the secondary sector produces manufactured goods, and the tertiary sector produces services. Together with mining, agriculture, forestry and fisheries represent the bulk of the primary sector in South Africa. This sector acts as a catalyst for economic development of the secondary and tertiary sectors, and many of the smaller settlements in South Africa are strongly dependant on this sector. Climate change and variability impacts the primary sector, and will unavoidably affect such settlements in a direct and indirect way" (CSIR, 2019).

Agriculture as a sector is an important component of rural South Africa. It provides employment opportunities and livelihoods to a large percentage of the population. Agriculture, in addition to its employment benefits, also makes and supports important investments into a number of other sectors and areas such as roads, storage facilities, power generation and transmission, railways and indirectly schools and healthcare facilities.

Thus, a stable and well-developed agricultural sector is essential to the stability of a place. However, with the spectre of climate change, this is all placed under severe pressure. Without effective mitigation measures, the sector and related settlements and areas could destabilize rapidly (CSIR, 2019).

3.1.4.9 Surface water

Water supply (specifically surface water) is considered to be the prime area in which the effects of climate change will be evident. The main element of this is water availability which is related to changes in precipitation, temperature and evaporation.

The impact of climate change on surface water supply shows that most municipalities in South Africa will see an increase in water supply risk, either as a result of increasing population growth or exposure to other functions such as evaporation. In areas where population may decline the risk of water supply decreases and water supply may increase. However, this may also lead to increased high intensity rainfall events which in turn leads to flooding. The main outcome of this, however, is that the need for municipalities to be connected to a wider bulk water transfer system is essential. With such a system the impact of climate change on water supply can be lessened to some extent (CSIR, 2019).

3.1.4.10 Groundwater

In a similar vein to surface water, the risks associated with climate change and its impact on groundwater are a reality. Groundwater, as a natural resource, availability and distribution is highly influenced by climate variability and change.

As a result of climate change, the groundwater recharge potential is expected to decrease substantially across the municipality and wider north-western region of the country. However, the importance of groundwater is only expected to increase as surface water is placed under more and more pressure. This increased reliance on groundwater is not without its own risks. With increased usage, the draining and depletion of aquifers increases which can lead to sinkholes.

The use of groundwater in Ratlou is important as it provides the majority of water to nearly all the settlements within the municipality. With increased pressures on groundwater the depletion risk increases greatly. Projections for 2050 indicate that settlements such as Setlagole and Madibogo are at medium risk of groundwater depletion. This gives urgency to proper and adequate water usage and management systems to be in place (CSIR, 2019).

3.2 Provincial

3.2.1 State of the Province Address, 2019

In his, 2019 State of the Province Address, Premier Tebogo Job Mokgoro enforced the mandate set in the 2019 State of the Nation Address made by President Cyril Ramaphose of seven priorities for the nation. Reaffirming these seven priorities and the importance of the NDP, the Premier restated the seven priorities:

1. Economic transformation and job creation;
2. Education, skills and health;
3. Consolidating the social wage through reliable and quality basic services;
4. Spatial integration, human settlements and local government;
5. Social cohesion and safe communities;
6. A capable, ethical and developmental state; and
7. A better Africa and world.

The Premier also emphasised the important economic activities such as mining, agriculture, tourism and the arts as areas to create employment. In supporting of these the Premier indicated the following spatial considerations to be taken:

- Industrial and Business clustering to ensure that approvals for the location of businesses are done in ways that would encourage proper value chain by ensuring easy access to markets for final products;
- Provision of linkages with local businesses to ensure inclusive participation by historically marginalised groups in the provincial economy;
- Skills and human resources development by providing incentives or subsidised price for using provincial public infrastructure to all those who employ persons from the designated groups; and
- Institutional framework and mainstreaming of Provincial and Local Growth and Economic Development initiatives with national policies.

Additionally, the Premier called for the implementation of catalytic projects in the North West which includes the building of new settlements in line with the Spatial Plan and the National Development Plan. Cross-border linkages and corridors with both the surrounding provinces and countries is also emphasised. Tourism is also a key focus sector for the Province with specific focus given to its high employment potential (NWOOP, 2019).

3.2.2 North West Provincial Development Plan 2013

The North West Provincial Development Plan (PDP) was developed by taking due cognisance of the NDP and its vision 2030. In this vein, the NDP highlights thirteen key national development priorities. The PDP has identified eight of these as applicable to the province. The eight priorities of the NDP and in turn the PDP are the following:

1. Economy and employment;
2. Economic infrastructure;
3. An integrated and inclusive rural economy;
4. Human settlement and spatial transformation;
5. Improving education, training and innovation;
6. Building a capable and developmental state;
7. Fighting corruption; and
8. Transforming society and uniting the province.

The PDP, additionally, includes a number of spatial elements and influencing factors, based on the Provincial Spatial Development Framework, which include the following (NWPG, 2013):

1. Migration;
2. Land (understanding its functioning);
3. Cohesive, integrated and inclusive human settlements;
4. Spatial equity, economic competitiveness and environmental sustainability;
5. Competitiveness corridors;
6. Nodes of competitiveness;
7. Rural Restructuring Zones;
8. Resource Critical Regions; and
9. Special Intervention Zones.

3.2.3 North West Provincial Spatial Development Framework 2017

The North West Provincial Spatial Development Framework, 2017(PSDF) (NWPG, 2017), supports the broader provincial objectives to restructure spatial development patterns, address inequalities and achieve integrated development within the province.

The North West SDF, 2017, was drafted in line with the national objectives, contained in the Vision 2030 - National Development Plan and meets the requirements, as set out in the SPLUMA, 2013.

The objective is to develop a framework and development strategies that will manage future growth in a way that protects and enhances the use of natural resources, biodiversity and lifestyle values. This requires a highly sustainable pattern of development based on the efficient utilisation of land and infrastructure.

It highlights the requirement to adapt the spatial planning, land use management systems and policy frameworks to meet the unique needs of developmental governance in the North West Province.

The North West SDF, 2017, presents the following spatial development vision: *“A sustainable urban and rural spatial development pattern focused on a modern, ecologically sustainable economy, supported by a suitably skilled labour force and providing for quality of living.”*

It provides a future perspective of managed human settlements clustered in settlement nodes and corridors alongside productive areas, managed ecological natural resource areas and connected to a network of strategic transportation routes that are open to the global, national and provincial economy. The core spatial development values of the North West Province are defined as:

- Environmental integrity and sustainability;
- Optimum use of existing resources;
- Reduced settlement sprawl and more compact formalised settlements;
- Rapid and sustained economic growth;
- Government spending on fixed investments that can mobilise private sector investment;
- Productive land uses which can stimulate economic growth;
- Projects to address poverty and the provision of basic services in areas with low economic potential;

- The economic development of rural areas;
- Strategic capital investment into activity corridors and nodes that are linked to main growth centres;
- Integration, synergy and linkages between urban and rural areas;
- Community-based spatial planning;
- The correction of historically distorted spatial patterns of settlement; and
- Monitoring and evaluation of achievements in service delivery.

The North West SDF, 2017, sets out five strategic objective (Figure 13: Five strategic objective areas as identified by the PSDF) areas (NWPG, 2017, p. 172) as the foundation for the spatial development strategies of the North West Province. The section following this diagram presents a direct extract and summary of key points relating to the strategic objectives as presented in the framework (NWPG, 2017).



Figure 13: Five strategic objective areas as identified by the PSDF (NWPG, 2017)

Strategic Objective 1: Focus development on regional spatial development initiatives, development corridors, development zones and nodes.

Key points:

- Development should focus on linkages with existing regional and sub-regional spatial development initiatives such as the Platinum Development Corridor, the Coast 2 Coast Corridor and the North-South Mega Africa Corridor;
- It should support regional cooperation in targeted areas, including agriculture, trade, transboundary resources and tourism;
- It should facilitate the mobility and movement of goods and people within the sub-region and enhance cross-border trade;

- It should manage natural assets and the development of tourism initiatives, especially those linked to World Heritage sites, national parks and anthropological sites;
- It should strengthen development corridors, zones and nodes especially the Platinum Corridor (N4), Treasure Route Corridor (N12) and Western Frontier Corridor (N18);
 - It should provide for new provincial corridors such as the JB Marks – Mahikeng link;
 - It should increase access to economic opportunities for disadvantaged rural communities; and
 - It should consolidate economic activity at strategic locations within development corridors and concentrate investment in areas with potential for sustainable economic development.

Strategic Objective 2: Protect biodiversity, water and agricultural resources

Key points:

- Protected areas and critical biodiversity areas needs to be conserved, expanded and included in all spatial development frameworks and processes;
- A Protected Areas Network should be established that can support the wildlife economy of the North West;
- Good management of the region's water resources should be regarded as a priority; and
- Strategies should ensure intact and well-functioning natural ecosystems that are resilient to the impacts of climate change

Strategic Objective 3: Infrastructure investment

Key points:

- There must be a balance between investment that meets the social needs of communities and investments designed to promote economic development and job creation;
- Economic infrastructure provision should focus on projects identified in the national Strategic Infrastructure Projects (SIPs);
- Water infrastructure should address the management of existing sanitation installations, attend to ground water quality, replace ageing infrastructure and focus on surface water quality in major dams and rivers in the North West Province;
- The provision of energy infrastructure should identify and meet the requisite investments that will enable the province to meet its growth and development objectives;
- Social infrastructure must eradicate backlogs and improve outcomes in the fields of education, health services and public transport;
- Tourism infrastructure must support the province's strengths in areas such as wildlife and nature, activity and adventure, leisure and entertainment, cultural heritage and events tourism;
- Agriculture-related investment should focus on support for existing commercial farming activities as well as enhancing agrarian transformation in the deep rural areas of the North West Province;
- Mining infrastructure should focus on the beneficiation of minerals and the revitalisation of mining towns that are in distress; and
- Investment in manufacturing infrastructure should take place within the identified corridors and enhance accessibility and linkages between the development nodes.

Strategic Objective 4: Economic development and job creation

Key points:

- Future growth in the province should be managed according to a four-pronged approach:
 - There must be a *revival strategy* to re-establish local economic integrity and revive older, struggling and under-developed economies; (*Ratlou is identified as a focus area for this strategy*);
 - This must be supported by a *kick-start strategy* that builds on existing strengths within local economies and emphasises innovative development projects; (*Ratlou is identified as participants in this strategy*);
 - A *growth management strategy* must be introduced to establish nodes that can serve as catalysts for commercial, retail, manufacturing and office sector development; and
 - A *diversification strategy* must be introduced to identify new opportunities for growth and mobilise future investment.

Strategic Objective 5: Balancing urbanisation and the development of rural areas

Key points:

- Sustainable cities and towns must be established where people, jobs and services are aligned to create functional, integrated and vibrant settlements;
- The integration of urban and rural areas must be promoted through directing the flow of resources to areas where they have the largest economic and social benefits;
- Rural areas, small towns, settlements and villages must be revived into vibrant and sustainable communities;
- Rural development can be promoted through the provision of economic infrastructure that supports tourism, agriculture and mining as well as social infrastructure; and
- Land reform should be supported through accelerated land restitution, security of tenure and the clustering of villages.

The North West SDF, 2017, sets out implementation guidelines that will ensure the growth of integrated, sustainable human settlements, support access to basic services, focus on densification and direct development closer to corridors and economic opportunities.

Strategic development guidelines and catalytic capital programmes for the Ratlou LM include:

- Future demand in the municipality is low. The focus must be on the eradication of backlogs relating to housing and services;
- Rural towns and villages must be integrated and linked to reduce disparities;
- The delivery of basic services must be focused in core areas to create agglomeration advantages;
- The Setlagole commercial hub must be positioned as a catalyst for local economic development;
- The potential of tourism nodes must be unlocked;
- Accessibility and mobility in the district must be increased;
- There must be a focus on skills development in the agriculture and trade sectors;
- High-value arable land must be protected;
- Water infrastructure development must be prioritised; and
- The establishment of small, medium and micro-enterprises (SMMEs) must be promoted to create employment opportunities.

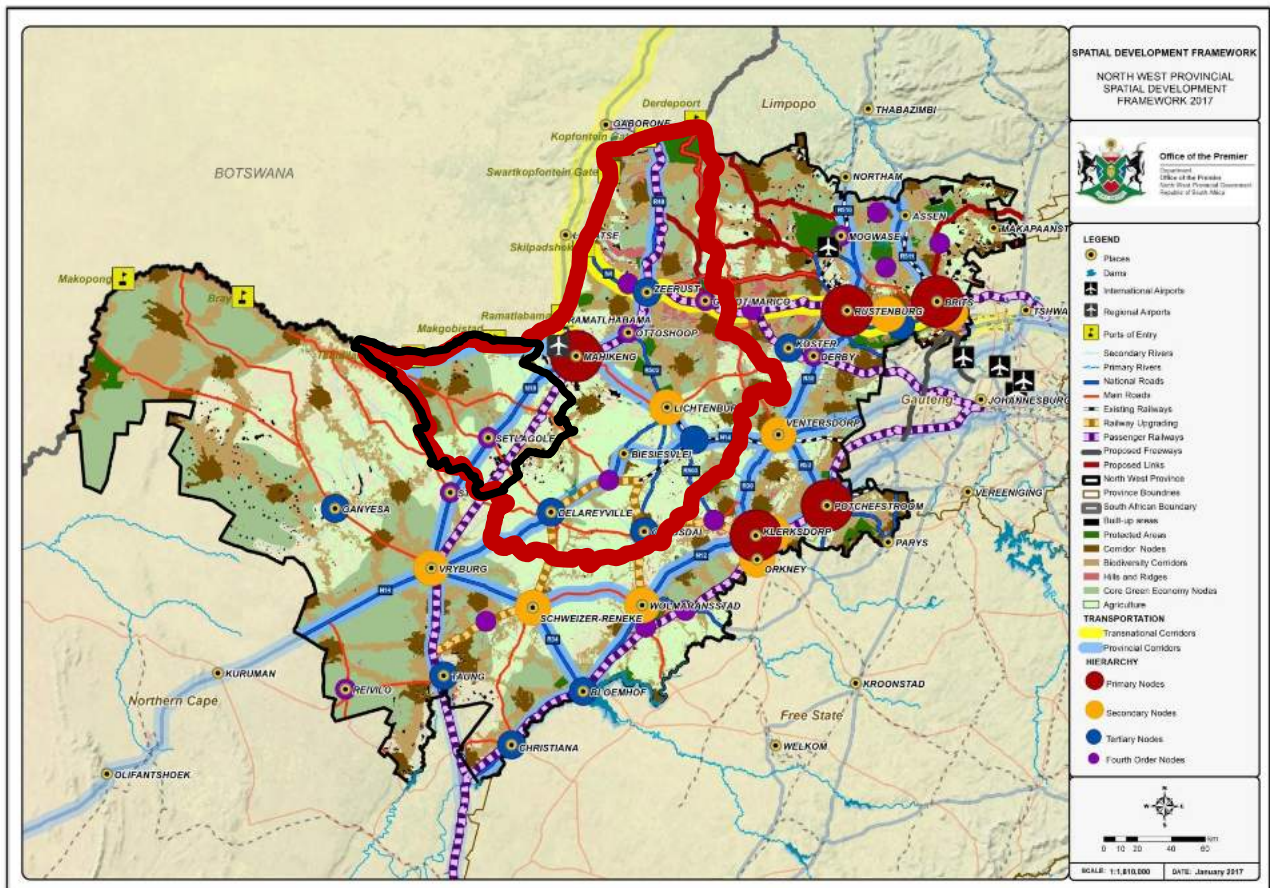


Figure 14: North West Provincial Spatial Development Framework (NWPG, 2017)

The North West Provincial SDF (refer to **Figure 14: North West Provincial Spatial Development Framework**) has a number of implications for Ratlou LM such as the focus on the movement network in form of the N18 which is classified as a provincial corridor. Additionally, the railway line that passes near the municipality is an important passenger route. The settlements of Ratlou are also categorised into a hierarchy with Setlagole being classified as the only major node in the municipality (fourth order node). The final component of the SDF is the focus on the biodiversity and spatial networks within the municipality. This identifies the northern and central areas as biodiversity corridors and core green economy nodes. The final prominent element in the SDF highlights the two Ports of Entry in Ratlou. These are connected by a provincial corridor which runs along the border.

3.3 District

Unlike the national and provincial policies, which mostly focus on national priorities and directions, the District policies have a direct bearing on the development of Ratlou.

The Ngaka Modira Molema District SDF, 2008 (CDM, 2008) is currently under review. The current Ngaka Modira Molema DSDP, 2008 and Ngaka Modira Molema District Rural Development Plan, 2016 (DRDP) were, however, used to formulate a local understanding described in Section 3 of this document.

3.3.1 District Spatial Development Framework, 2020 – 2025

The development of the Ngaka Modira Molema SDF, 2020 is underway. This will be incorporated in the following phase of the project.

3.3.2 District Rural Development Plan, 2016

The DRDP is informed by a functional regional approach for Ngaka Modira Molema district municipality. The salience of this approach to rural development, rests in its emphasis of the economic development of the Ngaka Modira Molema villages and rural townships and is fundamentally dependent on these places; linkages with established nodes, notably Mahikeng (primary node), Zeerust (tertiary node) and Lichtenburg (secondary node). A functional region therefore would typically have established nodes as well as areas in need of various forms of intervention from a development perspective. Datasets such as accessibility index, strategically located land index, Gross Value Add and population growth/decline informed the spatial analysis and subsequent identification of functional regions for Ngaka Modira Molema district municipality.

Ratlou:

Functional Region 4: Madibogo and Surrounding Settlements

Ratlou Local Municipality houses Functional Region 4 and this region includes settlements such as Setlagole, Ramabesa and Morolong. The main town identified in this area is Madibogo. The R507, R377 and R376 are major routes that enable the movement of goods and services in support of trade and commerce. There are CRDP sites in the region. Some of the agriculture infrastructure in the region includes poultry and red meat abattoirs, grain silos and SAGIS processors. The Disaneng Irrigation CASP project, located near Mofufutso village, lies within this functional region. There is an availability of iron mining commodity and existence of an active mine in this functional region. The agriculture potential shows that the land is arable and there are streams that flow within the region. The SLL Index agriculture shows that the area is partially good for agriculture activities. The main economic sectors are small-scale mining and agriculture.

Proposed Interventions: Functional Region surrounding settlements

- Provision of basic services such as water and electricity are important for this region. Given the growing population in the region, water scarcity puts a strain on the livelihoods of residents;
- Foster the linkage of the farmer Production Support Unit and the Agri-Park in the district, to allow development of subsistence farming;
- Participation of women and the youth in the district tourism opportunities;
- Investment in infrastructure development to strengthen construction and manufacturing sub-sector;
- Investing in developing small-scale mining in order to utilise the available iron commodity. However, careful consideration needs to be given to the impact of mining operations on the natural environment, as well as competing land uses for mining and agriculture. In the event that the land has been identified as having high agricultural capability, then it should rather be used for agriculture, not small-scale mining.

Ratlou houses Intervention Area 4 which comprises of Moroleng, Dikgatlong, and Setlagole settlements. Grain silos can be found in Ratlou village. The R507 connects the settlement to Delareyville which is the nearest town. Setlagole River flows through this region. Grain Silos are the prevalent supporting infrastructure found here. There are a number of VTSD projects located in the Ratlou local municipality. These are livestock and piggery focused initiatives and are located in Madibogo and Setlagole villages. The Tshimo ya Kgosi Phoi project, a livestock project, is located in Madibogo village. It provides water, handling facilities and a 10km fencing infrastructure development. The Tsamai and Sons Farming project provides piggery infrastructure, water connection and production inputs such as feeds, medication and breeding stock. It is located in Setlagole village.

3.4 Local

3.4.1 Ratlou by-law on Spatial Planning and Land Use Management

The Ratlou LM by-law on Spatial Planning and Land Use Management (Chapter 2) contains the following components that are applicable to this SDF:

Section (4) Municipal spatial development framework:

- (1) The Municipality must prepare a municipal spatial development framework and amend and review it in accordance with the provisions of sections 20 and 21 of the Act read with sections 23 to 35 of the Municipal Systems Act.
- (2) The municipal spatial development framework does not confer or take away land use rights but guides and informs decisions to be made by the Municipality relating to land development.
- (3) The provisions of this Chapter apply, with the necessary change, to the review or amendment of a municipal spatial development framework.

Section (5) Contents of municipal spatial development framework:

- (1) The municipal spatial development framework must provide for the matters, contemplated in section 21 of the Act, section 26 of the Municipal Systems Act and provincial legislation, if any, and the Municipality may for purposes of reaching its constitutional objectives include any matter which it may deem necessary for municipal planning.
- (2) Over and above the matters required in terms of subsection (1), the Municipality may determine any further plans, policies and instruments by virtue of which the municipal spatial development framework must be applied, interpreted and implemented.
- (3) The municipal spatial development framework must contain transitional arrangements with regard to the manner in which the municipal spatial development framework is to be implemented by the Municipality.

3.4.2 Ratlou Integrated Development plan, 2017 – 2018

The Ratlou IDP, 2017 – 2018, was also used to gain an understanding of the Ratlou LM which is presented in Section 3. The IDP projects were mapped and detailed in **Addendum D - Google Earth**.

3.4.3 Ratlou Land Use Scheme, 2016

The purpose (clause 4) of the Ratlou Land Use Scheme, 2016, is to give effect to the municipal spatial development framework and determine the use and development of land within the municipal area to which it relates in order to promote:

- a) Economic growth;
- b) Social inclusion;

- c) Efficient land development; and
- d) Minimal impact on public health, the environment and natural resources.

According to clause 5: Components of land use scheme, the scheme comprises of the following:

5.1 This Scheme consists of:

- a) Scheme Regulations setting out the procedures and conditions relating to the use and development of land in any zone;
- b) The Register, which in addition to the statutory information, also records the Land use rights and conditions of approval relating to each land unit; and
- c) Zoning maps, showing zones and properties in the Municipal Area and indicating the zoning of each land unit.

5.2 The general purpose of zoning is to:

- a) Determine the use rights attached to particular land units with a view of achieving a desired land use;
- b) Outline the parameters within which land may be developed in order to manage development.

3.4.4 Ratlou Spatial Development Framework, 2012 – 2017 (review)

The Ratlou SDF, 2012 – 2017 review focuses on the status of the spatial development proposals and broad settlement proposals of the framework. See the table below **Table 6: RATLOU SDF 2012 – 2017 SPATIAL PROPOSALS**.

TABLE 6: RATLOU SDF 2012 – 2017 SPATIAL PROPOSALS		
SPATIAL PROPOSAL	IMPLEMENTATION STATUS (Yes/Partially/No)	DETAILS
Setlagole Commercial Hub	Partially	A feasibility study was conducted in 2013. Property was surveyed and an application in terms of the Interim Protection of Informal Land Rights Act, 199r (IPILRA) was submitted to DALRRD (formerly DRDLR). The municipality has advertised tenders for investors. Appointment is to be finalised.
Madibogo Gateway Node	Partially	Although there have been developments in this regard the development of this gateway node has not been completed. To date the development that has occurred consists of a taxi rank, retail (overland wholesalers) and filling station.
Kraaipan Cultural Node	Yes	The following developments have taken place since 2012: <ol style="list-style-type: none"> 1. Kraaipan community library; 2. Kraaipan reverse osmosis plant; 3. Kraaipan museum (South African war exhibition); 4. Kraaipan cover ground; 5. Kraaipan exhibition centre (Nelson Mandela long walk to freedom exhibition); 6. South African war monuments (tourism signage, gravesite and longtom canon site); and 7. Construction of internal roads.
Mareetsane Gateway Node	Partially	The construction of the Police station and holding cells. Major road works (construction and improvement) by DALRRD is currently (as of 2019) in process.
N18 Transformation Corridor	Yes	Setlagole shopping centre approved on portion 2 of the farm Setlagole south (private investment).

Setlagole – Madibogo Corridor "Civic Corridor"	Yes	Settlement formalisation and tenure upgrade for Setlagole and Madibogo (township establishment has been completed). DALRRD to fund tenure upgrading. Land donation to Ratlou LM has been approved.
Kraaipan – Setlagole Corridor "Heritage Corridor"	No	N/A
Mareetsane – Setlagole Corridor "Mareetsane Corridor"	No	N/A

(Kapela, 2019)

3.5 Other policies and legislation to take cognisance of

A comprehensive list of policies and legislation is referenced and presented in **Addendum E**. The implications of the policies and legislation are briefly presented below, focusing on the most relevant extracts and discussions.

4 SPATIAL CHALLENGES AND OPPORTUNITIES

Ratlou LM is situated in the western part of the Ngaka Modiri Molema District. In the north it borders on Botswana and, more specifically, the Southern District administrative area. In South Africa, the Mahikeng Local Municipality is in the east, Tswaing in the south-east, Naledi in the south-west and Molopo in the west.

It has an estimated total population of 107 000 people and approximately 27 000 households which implies an average household size of 3.9 persons per household (StatsSA, 2011).

The total land area of 44 555 km² is predominantly rural in nature with land ownership divided between commercial agriculture and tribal authorities (StatsSA, 2011).

Setlagole is the administrative centre and the municipality is divided into 14 wards with 14 councillors elected through proportional representation.

The Ratlou LM has defined its vision to be *“a performance-driven and participatory municipality”* and describes its mission as *“to provide excellent services through consultation for sustainable development”* (RLM, 2012).

The Ratlou LM is predominantly rural in nature. It has no tax base except for rateable properties. There is, however, a potential to proclaim certain portions of land which has been given to the municipality by traditional leaders.

A Spatial Development Framework was developed in 2012 and a reviewed document was released in 2016.

The surrounding municipalities' current SDFs were consulted, where available. For an improved understanding of the context, surrounding the municipality, please refer to **The National Spatial Development Framework (April 2019 - Draft)**.

4.1 Sources of analysis

4.1.1 Data

The Census 2011 data is presented in **Addendum A: Electronic copy of StatsSA 2011 Census Data**.

The Community Survey data of 2016 is packaged in **Addendum B: Electronic copy of StatsSA 2016 Community Survey Data**.

4.1.2 Maps

The mapping of the municipality is divided into two components. The first is that of the general analysis maps that were utilised to inform the analysis of the municipality. These encompass the entirety of the municipality and is found in **Addendum C**. The second group, which is included this document, is that of the synthesis and composite maps. The maps include the entire municipality as well as zoomed in views of the main settlements and large settlement groupings.

The following maps informed the analysis and is presented in **Addendum C**:

- Agricultural potential;
- Agricultural potential per region;
- Annual Rainfall;
- Biodiversity;
- Dwelling type;
- Educational facilities;

- Electricity;
- Enumeration area type;
- Environmental use;
- Farm portions;
- Geology;
- Highest education;
- Household income;
- Household size;
- Landcover;
- Land use;
- Locality (built environment);
- Living Standard Measure (LSM);
- Mineral risk;
- Mining;
- Population density;
- Refuse removal;
- Relief;
- Renewable energy;
- Restored farms (land restitution);
- Sanitation;
- Soil;
- Unemployment;
- Vegetation; and
- Water source.

4.1.3 Strengths, Weaknesses, Opportunities and Threats determination approach

The Strengths, Weaknesses, Opportunities and Threats (SWOT) approach is based on a rating scale of values from -10 (lowest) to 10 (highest). The values in the tables to follow are based off these criteria. These ratings in turn are used in SWOT tables and graphs to illustrate where elements lie and how they are related to one another.

TABLE 7: SWOT VALUE DETERMINATION					
Weakness and Threat					
Value:	-10, -9	-8, -7	-6, -5	-4, -3	-2, -1
Rating:	Very high	High	Medium	Low	Very low
Description:	Very high impact, highly difficult to mitigate and limited or no timeframe available to alter.	High impact, medium to high difficulty to mitigate and somewhat limited or no timeframe available to alter	Medium impact, medium difficulty to mitigate and a medium length timeframe available to alter.	Low impact, little difficulty to mitigate and a medium to long time period available to alter.	Very low impact, very little difficulty to mitigate and a long timeframe available to alter.
Middle					
Value:	0,0				
Rating:	Fluid				
Description:	Potential to move in either of the four directions. Can change depending on related or other factors.				
Strength and Opportunity					
Value:	1, 2	3, 4	5, 6	7, 8	9, 10
Rating:	Very low	Low	Medium	High	Very high
Description:	Very minimal benefit, difficult to build off and a little timeframe required to expand upon.	Minimal benefit, somewhat difficult to build from and a small amount of time required to expand upon.	Medium levels of benefit, easier to build off and a medium amount of time required to expand upon.	High levels of benefit, very easy to build off and a longer timeframe required to expand upon.	Very high level of benefit, easiest to expand upon and a very long time required to expand upon.

4.2 Fields of analysis

4.2.1 Biophysical

4.2.1.1 Background

The topography is mainly flat with some hills and ridges scattered across the area (refer to **Addendum C - Map: 8**). Average temperature varies between 9°C in winter and 25°C in summer. It falls within the summer rainfall area with an average rainfall of between 388 and 490mm (refer to **Addendum C – Map: 10**). The Ratlou LMA appears to be susceptible to drought and climate change, with large areas appearing dryer and dryer over recent years.

The majority of the Ratlou LMA falls within the Savanna biome with instances of the Grassland biome on the eastern border.

The dominant land cover in the Ratlou LMA is classified as thicket and bush land (42%), degraded thicket and bush land (20%) and temporary dry land for commercial farming (15.9%) (refer to **Addendum C – Map: 14**).

Of special concern is some 914 km² of area which is classified as environmentally degraded. This is spread across the entire Ratlou LMA and poses challenges to the delivery of water and sanitation services. A large portion of the degraded land is in the north of the municipality near to the border with Botswana (refer to **Addendum C – Maps: 12 and 23 and Addendum D**).

Pockets of endangered Western Highveld Grassland have been identified in the Madibogo Pan area and in the region between Old Kraaipan and Maipeng (refer to **Addendum C – Map 14 and Addendum D**).

Three sites of cultural significance are located at Klipkerk, Maritzani site and the Kraaipan battlefield (refer to **Addendum D**).

Agricultural activity takes place across most of the area. Commercial farming is most prevalent in the central region where irrigation conditions are favourable while subsistence farming is practiced in the northern and southern regions. Agricultural activity is primarily based around crop farming with some small-scale livestock and piggery farming near Setlagole and Madibogo (refer to **Addendum C – Maps 4, 6, 7, 13 and 25 and Addendum D**).

One of the largest pig farms in South Africa, owned by Mr. Pierre Vercueil, is situated in the area. This farm produces a large percentage of the pork products nation-wide. Mr. Vercueil was a former President of Agri North-west and serves in numerous agricultural societies. On Clober Farm, aside from the pig operation, there is also dryland (crop) farming, including maize production as well as a large cattle component. This cattle component includes a large feedlot for backgrounding and rounding off calves and cattle. There is also a game farming component.

Feedlots farm is an important part of the farming operations in this area. Two other large feedlots and cattle operations are those of the Pretorius brothers of Ossie Pretorius Landgoed and the enterprise of Mr. Emile Bothma.

Another large agricultural component in this municipality is ground nut (refer to **Addendum C – Map 12**). It is extensively farmed in this area and processed locally, adding value to the wider municipality. In relation to processing, two companies operate here, namely New Nut, owned by Mr. Gerhard Dreyer and Roba Nuts, owned by Mr. Gerhard de Kock and his son, Lourens.

Maize farming is another common agricultural activity throughout the municipality. The operations of the Hobson family (father Carey and sons Garth and Richard) are involved in the production, but also processing of the maize, by owning their own mills. One of these mills is situated in Delareyville and in addition to processing, they produce their own products.

Game farming and tourism is also done in this area. Several of the farmers do have a small game farming component. There are also larger game operations in the area like Kudu Hills owned by Dr. Gideon Engelbrecht of Stella and that of Mr. Emile Bothma. These operations offer both tourism and hunting options to locals and people from outside the municipality and province.

A unique farming operation in this area is the bird farm of Mr. Louis Bothma, called Kleinbosch Birds. This is one of the larger, if not the largest bird farms in South Africa. They concentrate on the breeding of rare and endangered exotic bird species, mainly parrots and parakeets.

Mr. Bothma is an internationally regarded breeder who contributes to various publications around the world. He is also the president of the Parrot Breeders Association of Southern Africa (PASA/PVSA), the national society, who regularly engages with government and foreign role players.

There are scattered mineral pockets in the area, but very limited mining activities are taking place compared to the rest of the province. The only large-scale operational mine in the municipality is that of Kalgold, owned by Harmony Gold, located on the N18 between Setlagole and Mahikeng (refer to **Addendum C – Map 3 and Addendum D**).

TABLE 8: MINERAL RESOURCES IN RATLOU LOCAL MUNICIPALITY

Name	Geo Location	Resource	Reserves	Activity Description	Perceived Value	Activity	Source
Gold							
Kalgold (Kalahari Gold Ridge mine)	26° 9'52.98"S: 25°14'41.21"E	No data	(30 June 2018 figures) Proved= 9000kg Probable = 12000kg	Harmony Gold owns Kalgold and in 2018 report it estimates the lifespan to be at 15 years. Its current grade is 0.95g/t.	High	Active	Harmony Gold

The water system in the municipality is made up of small streams and tributaries of the Molopo River in the north of the municipality. The Disaneng Dam is the main dam in the north of the municipality. A number of smaller dams are spread throughout the commercial agricultural areas in the south (refer to **Addendum C – Map: 11 and Addendum D**).

The entirety of the municipality lies within an area that receives considerable solar irradiation. This means that the overall photovoltaic power potential of the municipality is higher when compared to the rest of South Africa and is closer to areas of high energy demand, such as Gauteng Province. The areas of degraded land provide for prime locations to encourage Independent Power Producers (IPPs), as part of Eskom's IPP program to move into the area or consider its location (refer to **Addendum C – Map: 30 and Addendum D**).

4.2.1.2 Biophysical synthesis map

A synthesis of a wide range of bio-physical components were used to generate a composite sensitivity map using information from the North West Department of Agriculture and Rural Development (DARD) which illustrates a range of sensitivity from high to low.

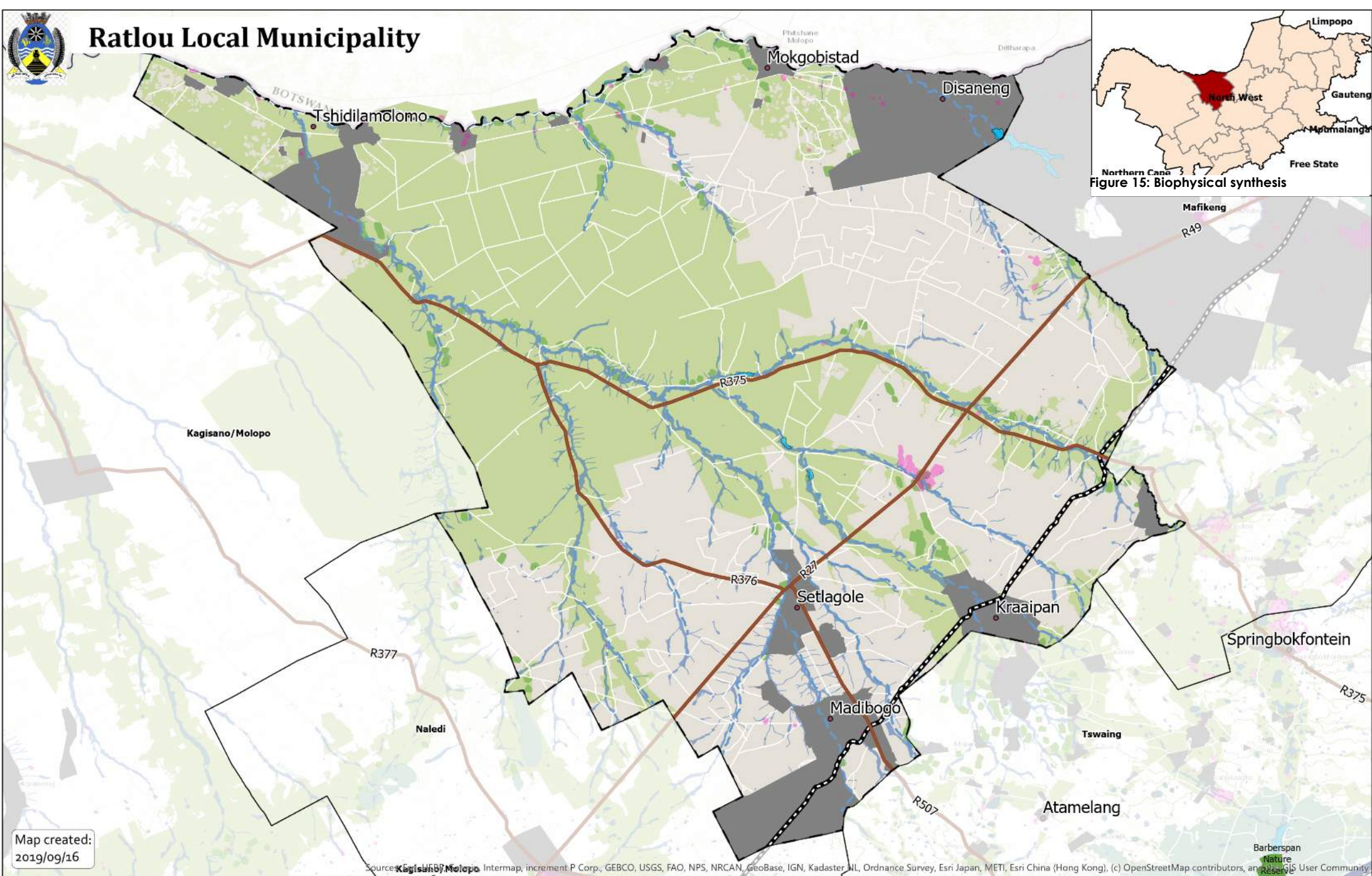
Therefore, the lower sensitivity areas could be regarded as more favourable for development from an environmental perspective, whereas the highly sensitive areas should be avoided or developed in a manner that mitigates environmental harm (refer to **Figure 15: Biophysical synthesis** and the zoomed in area maps).

4.2.1.3 Synthesis

The synthesis of biophysical data involved the evaluation of the current state of the municipality based around this respective field of analysis. It focuses on presenting a collective understanding of the Strengths, Weaknesses, Opportunities and Threats (SWOT) in the biophysical realm. As part of this assessment, a matrix was developed to aid in assessing where certain elements lie and how they influence the current state of the municipality.



Ratlou Local Municipality



LEGEND

Highway	Railway	Mining Landcover	Aquatic sensitive areas, hills and ridges and critical ecological patches of high sensitivity
Main Roads	Dams & water bodies	Town Boundary	Protective Area
Secondary roads	Rivers	Protective Area	Low sensitivity

Biophysical Sensitivity Level

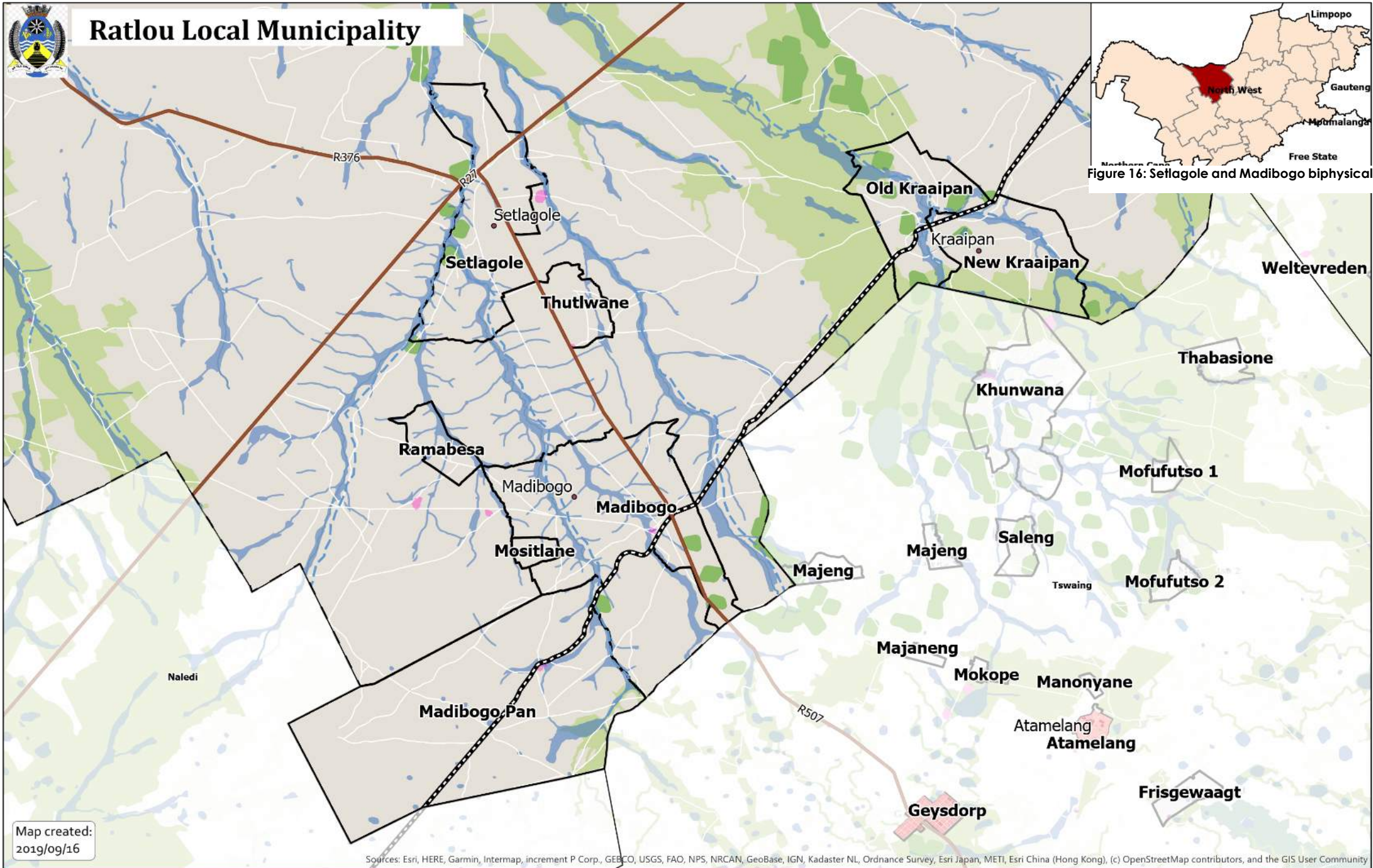




Ratlou Local Municipality



Figure 16: Setlagole and Madibogo biophysical



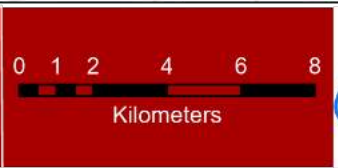
Map created: 2019/09/16

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

Erven	Railway	Town Boundary	Aquatic sensitive areas, hills and ridges and critical ecological patches of high sensitivity
Main Roads	Rivers	Protective Area	Low sensitivity
Secondary roads	Mining Landcover		

Biophysical Sensitivity Level: Madibogo





Ratlou Local Municipality



Figure 17: Disaneng and Mokgobistad biophysical



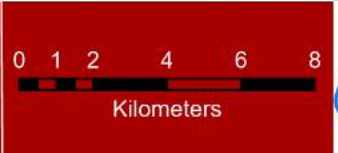
Map created:
2019/09/16

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

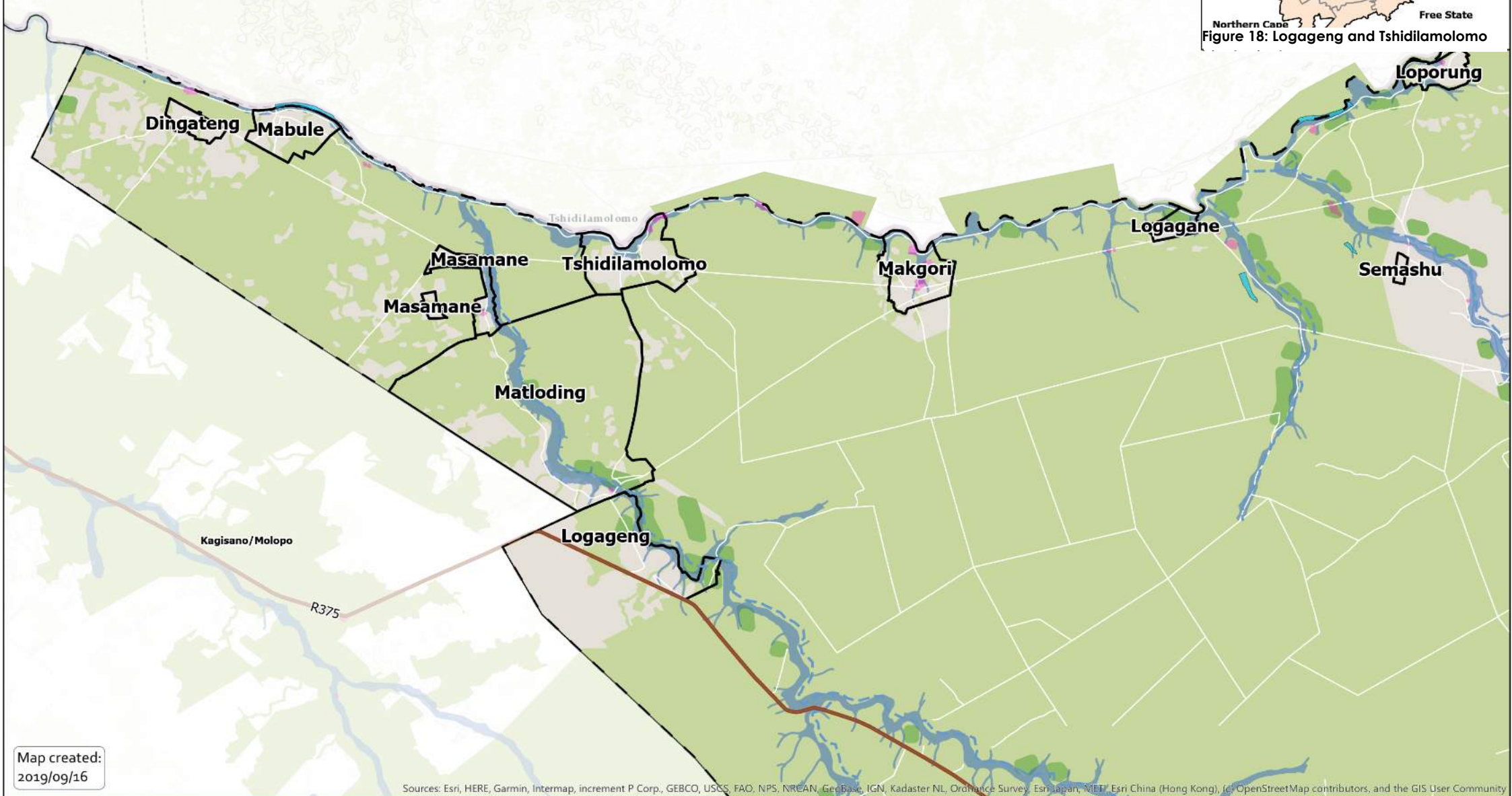
- Main Roads
- Rivers
- Protective Area
- Aquatic sensitive areas, hills and ridges and critical ecological patches of high sensitivity
- Secondary roads
- Mining Landcover
- Dams & water bodies
- Town Boundary
- Low sensitivity

Biophysical Sensitivity Level: Disaneng & Mokgobistad





Ratlou Local Municipality



Map created:
2019/09/16

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRECAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, SwiTL, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

- Main Roads
- Secondary roads
- Rivers
- Mining Landcover
- Town Boundary
- Protective Area
- Aquatic sensitive areas, hills and ridges and critical ecological patches of high sensitivity
- Low sensitivity

Biophysical Sensitivity Level: Logageng



TABLE 9: BIOPHYSICAL SWOT SYNTHESIS

SPATIAL ELEMENT	STRENGTH	WEAKNESS	OPPORTUNITY	THREAT	X AXIS	Y AXIS	REFERENCE	GEO-LOCATION
1) Mining (Kalgold mine)	Relatively small surface area occupied.	Proximity to water and river system.		Surface impact due to the open cast mining method utilised. Possibility of pollutants entering the water and surrounding environment.	-1	-1	Map 3: Mining landcover	26° 9'52.98"S: 25°14'41.21"E
2) Commercial agriculture	Utilisation of suitable crop types for the climate.	Overutilization and overgrazing of some areas in the municipality.	Land suitability allows for more livestock farming to occur as an alternative to crops.	Climate change will make the ability to grow crops very difficult.	1	0	Map 6: Agricultural Potential, Map 12: Environmental use and Map 23: Land use	Southern portion of the municipality
3) Small-scale agriculture (subsistence)	Occupies small areas of land.	Overgrazing and overutilization of the land leads to degradation of land.	Diversification of crop and plant types to ensure more resilient agricultural areas.	Climate change will make the ability to grow crops very difficult.	0	-2	Map 7: Potential per Agricultural region	Northern portion of the municipality
4) Topography	Largely flat with some variation near water and river systems.		Easily developable land and interesting features such as small outcrops and rises.		1	2	Map 8: Relief	Entirety of the municipality
5) Degraded land		Overgrazed and overploughed land. Poor topsoil.	Conversion into natural spaces for rehabilitation. Utilisation for renewable energy (solar)	Continued overuse and lack of protection.	0	-4	Map 12: Environmental use	Central and eastern portion of the municipality
6) Vulnerable vegetation and land		Vulnerable and susceptible vegetation.		Increased incursion from agriculture and other human activities.	-3	-4	Map 12: Environmental use	Central and eastern portion of the municipality
7) Water pollution (human activity)		Mining, settlement and agricultural waste and products entering water system.		Increased pollutants entering water systems such as rivers and aquifers.	-2	-5	IDP	Water systems
8) Geology	Majority of the municipality is developable.		Expandability is relatively easy.		1	1	Map 9: Geology	Entirety of the municipality
9) Climate change		Climate change is already altering the area with increased temperatures and more erratic weather patterns.		Temperature increases, less rainfall, less extreme rainfall days and a large increase in very hot days.	-3	-7	Greenbook	Entirety of the municipality

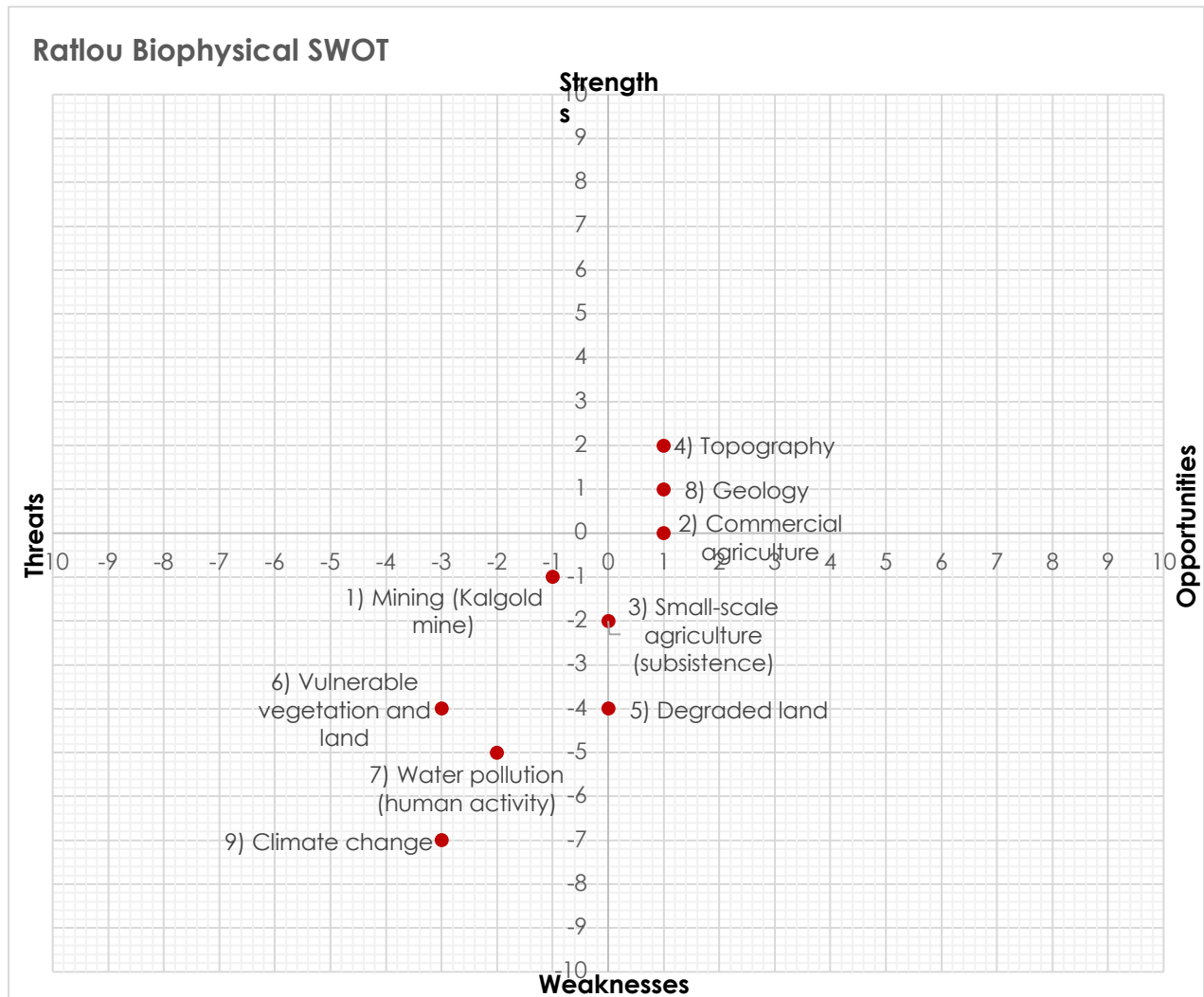


Figure 19: Biophysical SWOT

1) Mining (Kalgold mine):

The Kalgold mine, as mentioned prior, is the only large-scale mining operation in the municipality. In a biophysical evaluation of the mine it may be seen as a general threat and weakness to the municipality. This is due to its proximity to a water system. Without effective monitoring and processes in place it risks polluting or damaging the water system. Related to this, the open cast nature of the mine means that increased air pollution is present and if the mine is expanded this could impact the surrounding agricultural uses. A strength at present is its relatively small surface area which currently helps mitigate this potential threat.

2) Commercial agriculture:

Commercial agriculture is seen as generally being positive from a biophysical sense. It utilises crop types that are suitable to the current climate which makes them generally beneficial to the ecosystem. A weakness of this system is that even with suitable and appropriate crop types, overutilization and overgrazing will occur. This has led to areas being left largely degraded. Commercial agriculture does have opportunities and threats associated to it. An opportunity lies within the grazing suitability of the land in certain areas. This allows for some diversification in the agricultural sector. A threat faced by the commercial agricultural sector is largely around climate change. This may lead to a dramatic decrease in the growing potential of certain crops which may lead to the sector collapsing or declining drastically.

3) Small-scale agriculture (subsistence):

Small-scale agriculture in the form of subsistence farming is seen as an area that can go in any direction depending on a number of circumstances. However, at present a strength of small-scale agriculture is that it occupies small areas of land and thus leaving large areas of land preserved. This does come with its weaknesses, as occupying small areas of land leads to increased land use intensity which in turn leads to overutilization and overgrazing. Small scale agricultural areas have greater potential for diversification than commercial agriculture and this is an ideal opportunity for areas that can support it. Finally, as with commercial agriculture, the risk of climate change may hamper any expansion or diversification if the ability to grow crops is lessened or completely removed.

4) Topography:

Ratlou LM topography is overall beneficial in a biophysical sense. It allows for agriculture and other activities to occur relatively easily. The general flat nature and extent of it is suitable for development across the municipality. The odd areas where outcrops and ridges occur creates areas with interesting vistas and spaces.

5) Degraded land:

Degraded land is common in areas of the municipality. This, unfortunately, is a weakness as it disconnects areas and hampers certain potentially beneficial activities from collecting and building off of one another. It is also generally a result of overgrazing and overploughing which has led to the topsoil either being removed or deteriorated. An opportunity in these spaces is to designate conservation or natural spaces so as to aid in the recovery of the environment or to use them in an alternative manner such as for renewable solar energy fields. However, if this is not done the risk of larger and larger degraded areas due to overuse does exist.

6) Vulnerable vegetation and land:

Vulnerable vegetation and its associated land are generally seen as a weakness and threat. This is due to its close proximity to settlements and human activities. This proximity makes it easily prone to being damaged or destroyed as a result of direct (cutting down trees for fuel) or indirect (wildfires) human activity. This also presents a threat for the future as with the expansion of settlements the need for more land for agriculture, housing and other uses grows the more at risk these spaces become.

7) Water pollution (human activities):

Water pollution within the municipality is clearly identified as a constraint. This is due to human activity ranging in scale from littering to mining and agricultural pollution of the water system. The threat of this is that if the intensity increases it can begin to enter the ground water system of the municipality. This is of particular concern given the importance of ground water for human consumption and economic activities.

8) Geology:

The geology of the municipality is generally beneficial. This is due to the rock groups being suitable for a number of development types. This also provides an opportunity when expansion of settlements or developments is considered.

9) Climate change:

Climate change is an already present danger to the municipality. Temperatures and erratic weather conditions have already been experienced and are expected to increase in severity and intensity. The threat posed by climate change has the risk of pushing fauna, flora and crops beyond what they can withstand. This may lead to large areas becoming unsuitable and unusable.

4.2.2 Socio-economic

3.2.2.1 Background

The inhabitants of Ratlou are concentrated within the village settlements located across the northern and southern regions. In the south, the biggest concentration is living close to the N18 national road and the Mahikeng to Vryburg railway line. The vast majority of villages are in areas administered by tribal authorities (refer to **Addendum C – Map: 20 and Addendum D**) in the north. These settlements straddle the border with Botswana and often share a sister settlement in Botswana.

Vital figures quoted in the Ngaka Modiri Molema IDP are based on Stats SA 2011 Census and 2016 Community Survey figures (refer to **Addendums A and B**) and the Ratlou IDP, 2017 - 2022:

Estimated population – 106 000 (2016). Projected 2025, 2030 and 2050 refer to **Table 11: RATLOU HOUSEHOLD GROWTH ESTIMATES**.

- Racial profile – 98.2% black; 0.7% white; 0.7% coloured (2011).
- Gender profile – 52.8% female; 47.2% male (2016).
- Language – 91% of the population speak Setswana as a first language followed by Sesotho (2016).
- Level of education - Some 6% have completed high school and 16% has no schooling (2011), Some 8% have completed high school and 22% has no schooling (2016).
- Number of households – 27 000; average household size – 3.9 (2011).
- Age distribution – 0 – 14 = 38.7%; 15 – 64 = 53.9%; 65+ = 7.4% (2011), 0 – 14 = 32.4%; 15 – 64 = 57.7%; 65+ = 9.9% (2016).
- More than 80% of families live in formal dwellings (2011).
- Unemployment rate – 52.4%; youth unemployment – 43.9% (2011).
- Average annual household income – 28% of the population receive between R9 601 – R19 600 annual income, followed by 22.4% receiving between R19 601 – R38 200 (2011).
- More than 60% of the population travel on foot as the primary mode of transportation (2011).

The majority of residents rely on tankers for their water supplies and use pit toilets in the absence of waterborne sanitation (refer to **Addendum A, B and C – Maps: 15 and 26**). Roads and storm water are shared functions between the district and the municipality. There is limited access to basic electricity, which is provided by Eskom, especially in newly developed areas (refer to **Addendum A, B and D**). The IDP has identified a number of areas in which water, storm water, roads and electricity systems are targeted for improvement (refer to **Addendum D**).

Refuse disposal and waste management within the municipality remains a challenge (refer to **Addendum C – Map: 27**). This is reflected in numerous waste dumping sites located within settlements. Additionally, the dumping of waste and refuse in their own refuse dumps is a challenge faced by the municipality as well as the overall environment.

Housing is the responsibility of the provincial department and while Ratlou has provided community infrastructure such as community halls, sports grounds and libraries to some villages, the aim of council is to extend these facilities to un-serviced areas. The IDP has identified settlements mainly in the southern area to receive upgraded or new community halls and facilities (Setlagole, Madibogo, Morokwa and Mareetsane) (refer to **Addendum D**).

TABLE 10: AVERAGE HOUSEHOLD SIZE

Date	Average Household Size
2001 Census	4.6
2011 Census	3.9
2016 Community Survey	3.6
2025 downward trend using census difference	3

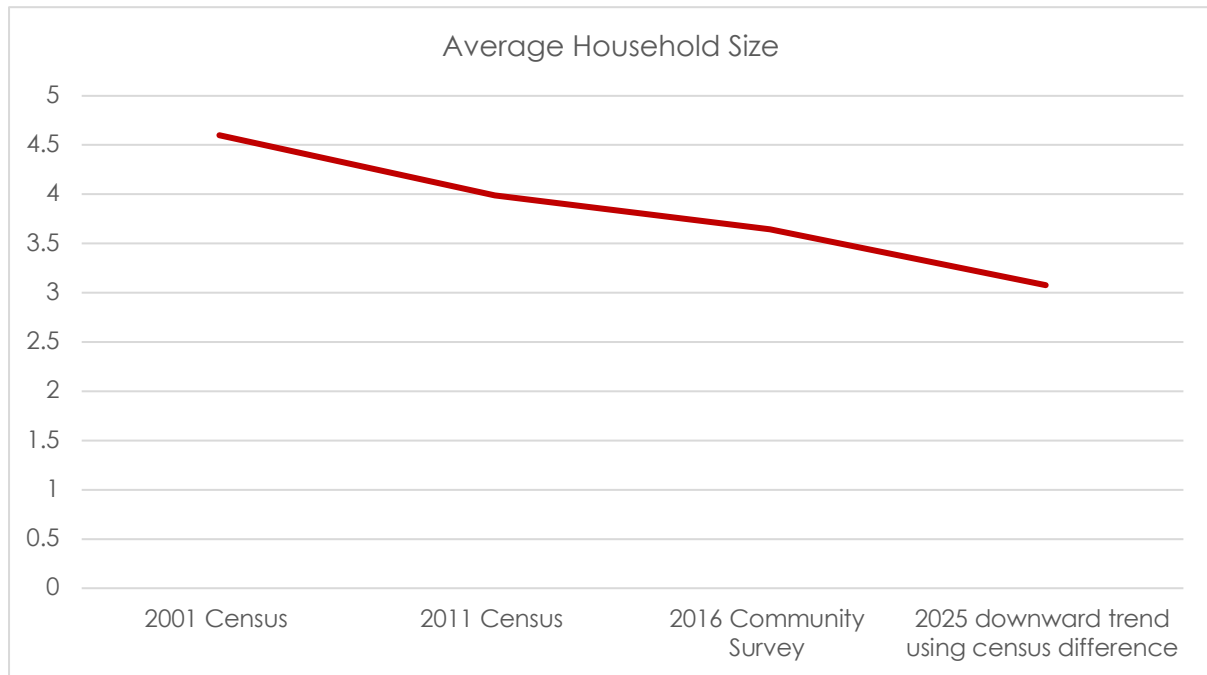


Figure 20: Average household size graph (StatsSA, 2011) with Cadre projections

TABLE 11: RATLOU HOUSEHOLD GROWTH ESTIMATES

	Pressure	2011	2016	2025	2030	2050
Average household size (2011)		3.9				
Average household size (2016)		3.6				
Average household size (2025) extrapolated		3				
2011	medium growth scenario	26 889	29 119	30 001	31 113	29 764
	high growth scenario	26 889	29 119	28 305	28 810	26 697
2016	medium growth scenario	26 889	29 119	32 859	34 077	32 599
	high growth scenario	26 889	29 119	31 001	31 555	29 240
2025	medium growth scenario	26 889	29 119	38 906	40 347	38 598
	high growth scenario	26 889	29 119	36 706	37 361	34 621
	Source:	Stats SA	Stats SA	Average household size	Average household size	Average household size

The use of medium and high growth scenarios is utilised in reference to **Urban growth (Greenbook)**. Specifically, the use of population projects as provided by the Greenbook.

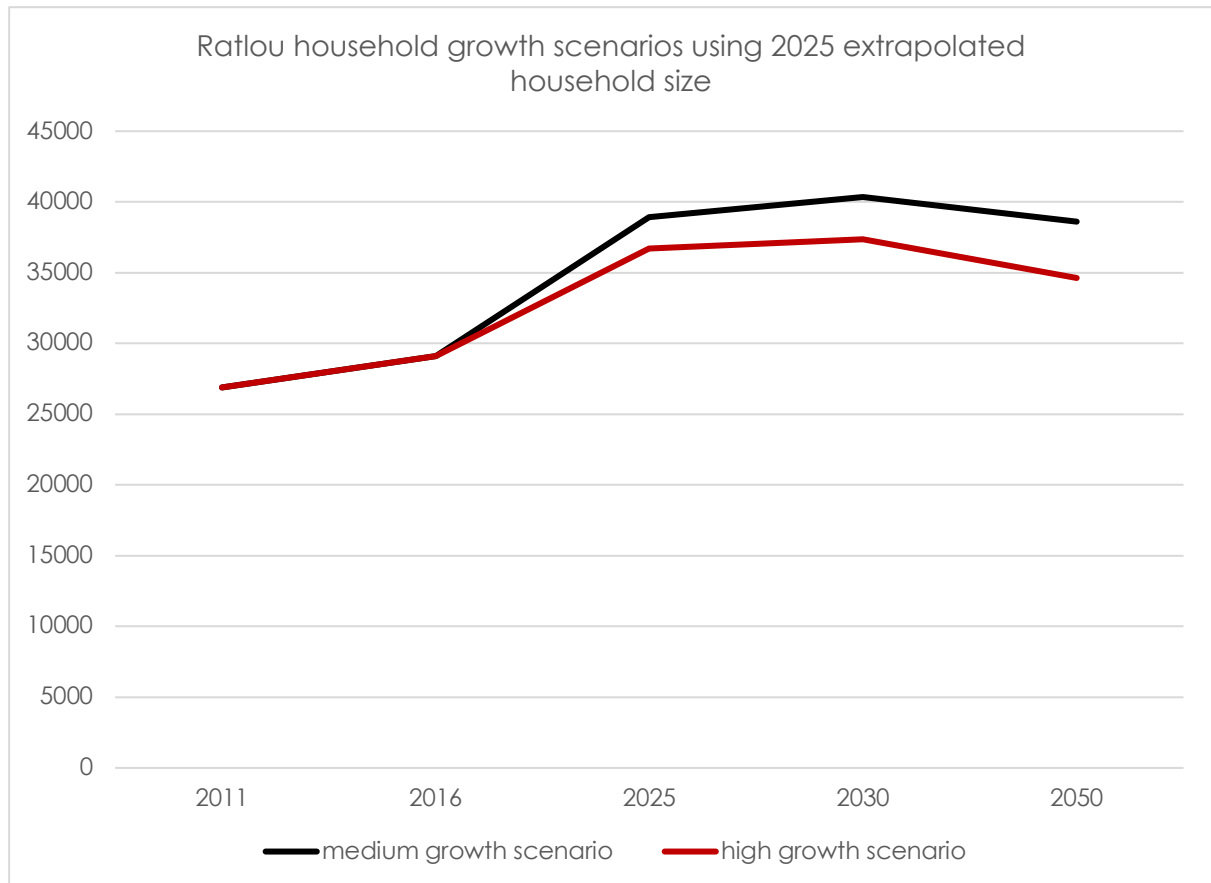


Figure 21: Household growth estimates (StatsSA, 2011) with Cadre projections

There are no major hospitals within the municipality, but clinics are distributed within village settlements concentrated in the region close to the railway line and freeway in the south and in the north-west near Logageng and Mabule.

Primary schools are located in many settlements, but secondary schooling is concentrated in the south around Madibogo Pan and Lenganeng (refer to **Addendum C – Map: 28**).

Economic activity mirrors the spatial patterns characterised by tribally administered villages in the north and south and commercial farming activity in the central region (refer to **Addendum C – Map: 4, 6, 7, 13 and 25 and D**) Small-scale, village-oriented retail and service activities are found close to some villages throughout the Ratlou LMA. Setlagole is the primary centre of economic activity in the municipality. It features a commercial area in the centre (N18 and R507) and the groundnut processing plant nearby. Madibogo is also an important economic centre in the municipality. The activity here is located along the railway line and grain silo in eastern Madibogo (refer to **Addendum D**).

Economic activity and employment trends within Ratlou are largely influenced by wider economic environment. As such, Ratlou economic activity and employment trends are depressed (as indicated in **Table 12: Growth In The District** (NWPG, 2017)). These values, specifically economic and employment growth, indicate an economy that is growing at a slow rate but still slightly above population growth. Employment growth in Ratlou, however, is of concern as it is in the remainder of the district. The retraction indicates that the local and wider economy are generally not particularly healthy in which more jobs are being lost than created. These trends are largely expected to continue given the overall negative economic state of the country as a whole.

TABLE 12: GROWTH IN THE DISTRICT (2016)

Municipality	Main settlement	GDP contribution	Economic growth	Population size	Population growth	Employment growth
Ratlou Local Municipality	Setlagole	3.6% (towards district)	1.3%	116 968	0.8%	-1.7%
Tswaing Local Municipality	Delareyville	8.0%	2.6%	134 674	1.9%	-2.1%
Mahikeng Local Municipality	Mahikeng	50.3%	2.4%	321 791	1.3%	-1.1%
Ditsobotla Local Municipality	Lichtenburg and Boikhutso	26.5%	4.4%	163 260	1.1%	-0.2%
Ramotshere Molloa	Zeerust	11.5%	2.0%	165 221	1.2%	-2%

Agriculture is the most important economic sector and can be divided into a formal and organised group of mostly white commercial farmers in the south and east. With black subsistence farmers in the north, around the small settlements and villages straddling the border (refer to **Addendum C – Maps: 7 and 23**). Maize, sunflowers and peanuts are the primary crops while livestock is cattle, goats and sheep. Additional small-scale piggery and livestock programmes are located in the south (refer to **Addendum C – Maps: 12 and 25**).

The primary socio-economic challenges (need to be reassessed), listed in the Ratlou SDF, 2012, are:

- Negative economic growth rate;
- Lack of high commercial and retail development;
- Limited economic opportunities;
- Youthful population structure;
- High illiteracy rates;
- Lack of food security;
- Large proportion of population generates no income (refer to **Addendum A**);
- High levels of dependency;
- Lack of skills especially with regards to business and communications technology;
- Lack of access to finance; and
- Security of tenure (refer to **Addendums A and B**).

Additional challenges include:

- Lack of a large economic hub or node in the northern parts of the Ratlou LMA (Disaneng or Mokgobistad).
- Limited economic diversification (agriculturally based economies).

4.2.2.1 Socio-economic synthesis map

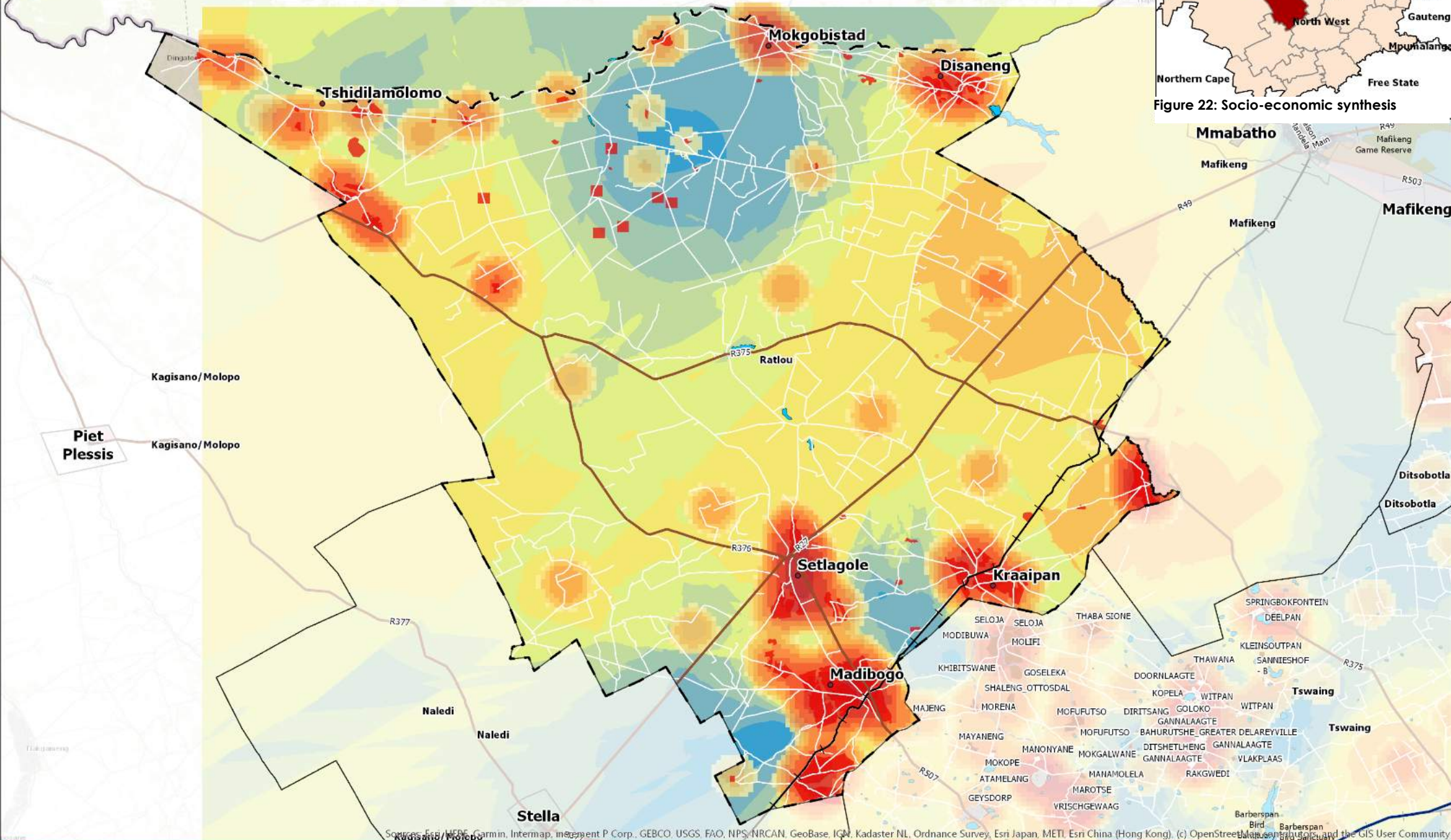
The purpose of the activity map is to accentuate areas where strategic interventions and investment would make the biggest impact. The activity analysis made use of (a) population density and GVA (Gross Value Added) as well as (b) a range of points indicating high value economic activity. Through this activity map, it also allows for the visualisation of inactivity in a socio-economic context (refer to **Figure 22: Socio-economic synthesis** and the zoomed in area maps).

4.2.2.2 Synthesis

The synthesis of socio-economic data involved the evaluation of the current state of the municipality based around this respective field of analysis. It focuses on presenting a collective understanding of the SWOT analysis in the socio-economic realm. As part of this assessment, a matrix was developed to aid in the assessment of where certain elements lie and how they influence the current state of the municipality.

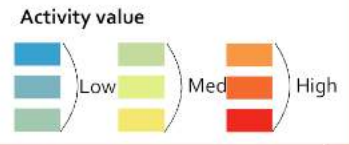


Ratlou Local Municipality



LEGEND

- Highway
- Secondary and other roads
- Rivers
- Settlements
- Main Roads
- Dams & water bodies
- Towns
- Railway



Activity Value:



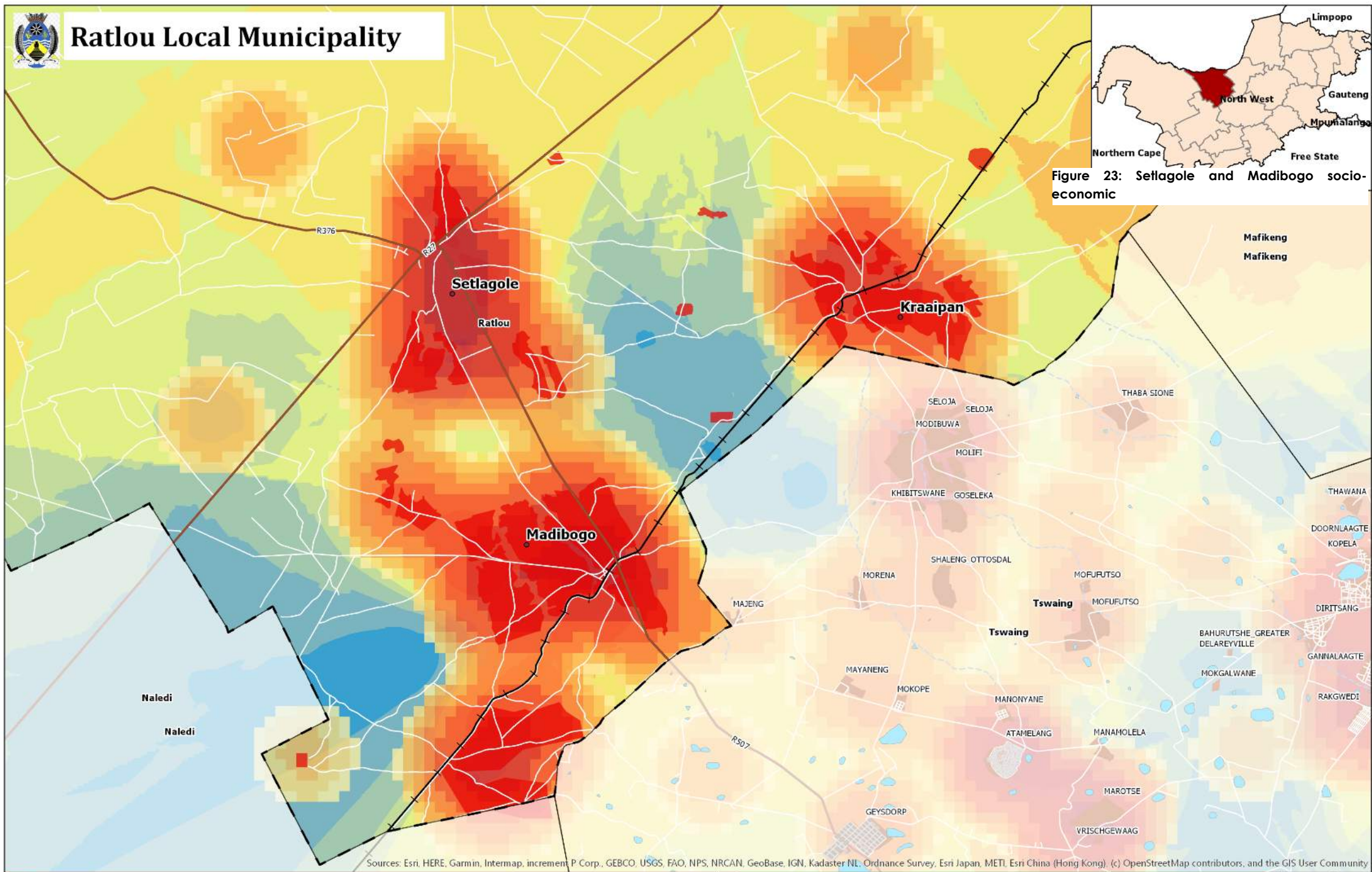
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, Swatch, and the GIS User Community



Ratlou Local Municipality



Figure 23: Setlagole and Madibogo socio-economic



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

- Highway
 - Secondary and other roads
 - Rivers
 - Settlements
 - Main Roads
 - Dams & water bodies
 - Towns
 - Railway
- Activity value**
- Low
 - Med
 - High

Activity Value: Kraaipan & Madibogo

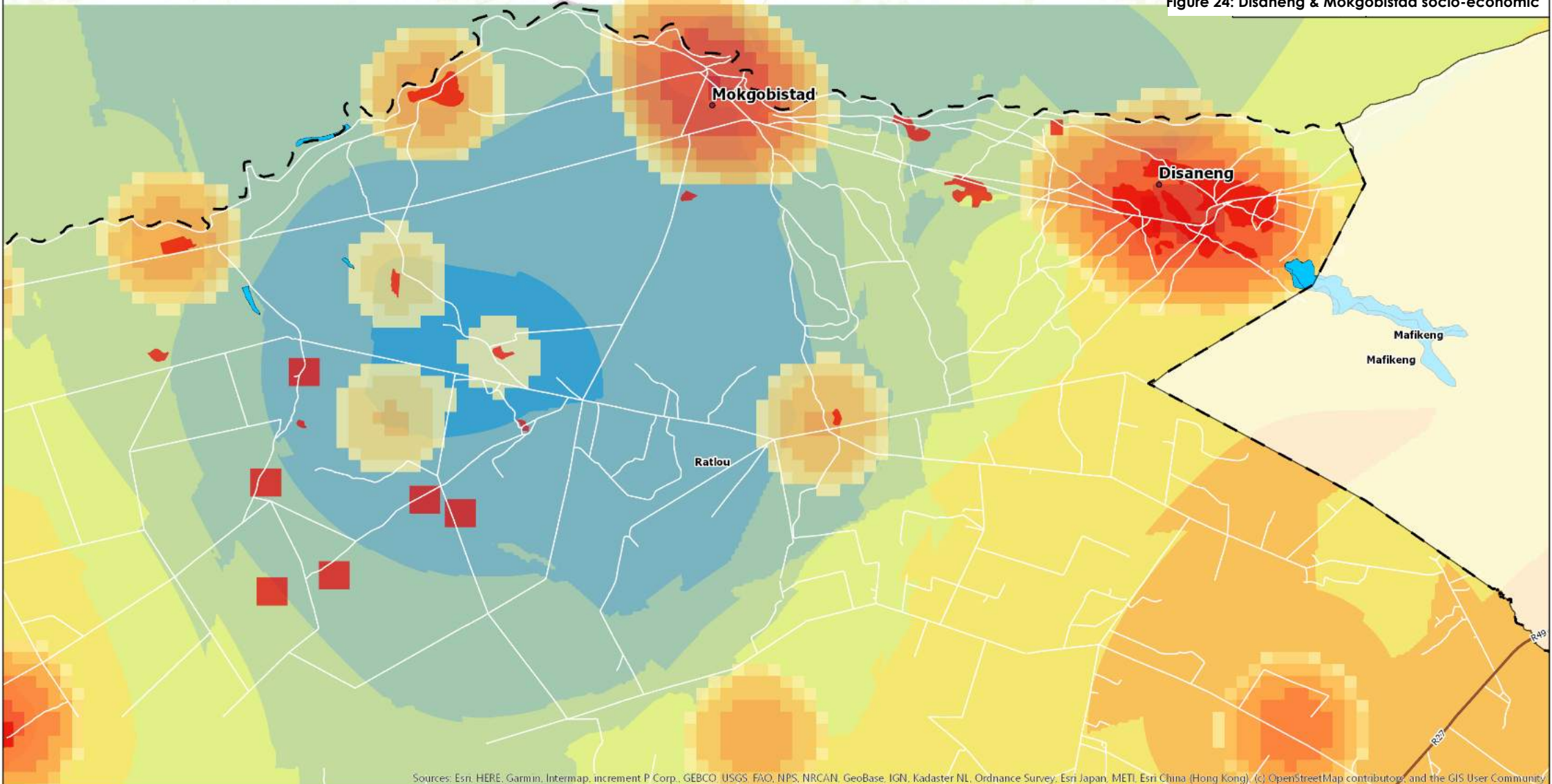
2 1 0 2 5
Kilometers



Ratlou Local Municipality



Figure 24: Disaneng & Mokgobistad socio-economic

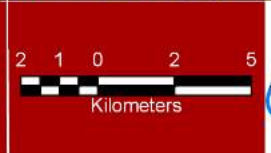


Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

Highway	Secondary and other roads	Rivers	Activity value		
Settlements	Main Roads	Dams & water bodies	Low	Med	High
Towns	Railway				

Activity Value: Mokgobistad & Disaneng

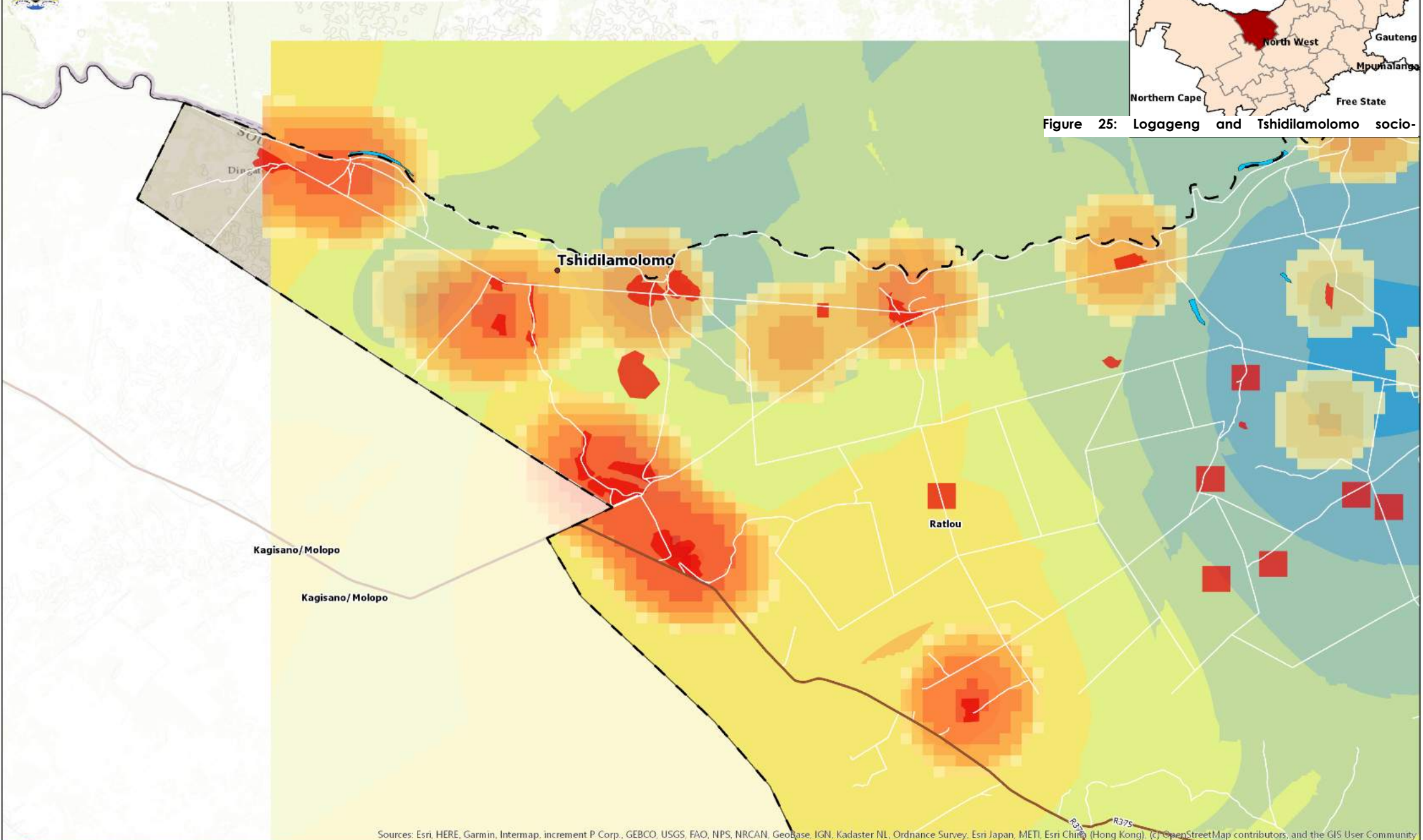




Ratlou Local Municipality



Figure 25: Logageng and Tshidilamolomo socio-



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

Highway	Secondary and other roads	Rivers	Activity value		
Settlements	Main Roads	Dams & water bodies	Low	Med	High
Towns	Railway				

Activity Value: Tshidilamolomo

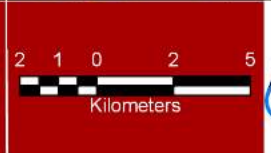


TABLE 13: SOCIO-ECONOMIC SWOT SYNTHESIS

SPATIAL ELEMENT	STRENGTH	WEAKNESS	OPPORTUNITY	THREAT	X AXIS	Y AXIS	REFERENCE	GEO-LOCATION
1) Tourism	Cultural areas such as Kraaipan battlefield with the museum. Resort areas at Disaneng dam.	Comparable advantage is not present when compared to wider region and province.	Molopo river during certain times of the year.		2	1	Google earth map - Visual observation	26°18'27.65"S: 25°19'18.65"E
2) Land reform	A number of farm portions have been transferred across the municipality.		Land reform in/around the traditional area can provide increased food and financial security.	Slow and irregular process of transfer.	1	1	Map 5: Restored farms	Entirety of the municipality
3) Mining (Kalgold)	Provides employment (571 as pf 2018).		Resource outlook for the mine is very positive. Continued operation is expected.	Commodity price of gold,	3	4	Map 3: Mining landcover and Map 13: Mineral risk	26° 9'52.98"S: 25°14'41.21"E
4) Poverty		Poverty is concentrated in main and rural settlements.		Lack of support for high poverty concentration areas may lead to increased social unrest.	-6	-6	Map 16: Unemployment	Entirety of the municipality
5) Energy (renewable energy projects)	A number of proposed renewable energy projects are situated in the north of the municipality. Smaller projects are spread in the south.	Small scale size of the proposed projects. Status of the projects is unknown.	Expandability of projects in the future can lead to increased employment opportunities.		4	3	Map 30: Renewable energy projects	Northern and southern portions of the municipality
6) Employment	Agricultural areas have lower levels of unemployment.	Main and rural settlements have very high levels of unemployment.		Increased levels of unemployment in main and rural settlements may lead to outwards migration and civil unrest.	-4	-5	Map 16: Unemployment	Entirety of the municipality
7) Cross-border (Botswana and South Africa)	Two ports of entry (border posts) along the border with settlements surrounding.	Large number of illegal border crossings.	Settlements and ports of entry (border posts) are mirrored in Botswana. Can be utilised to expand trade (goods and people).	Continued illegal and unmonitored crossings.	2	2	Google earth map - Visual observation	Border between South Africa and Botswana
8) LSM		Very low LSM across the entirety of the municipality indicates a general lack of services and goods.		Worsening of LSM will indicate a greater deterioration of services and access to goods.	-4	-3	Map 17: Living Standard Measure	Entirety of the municipality

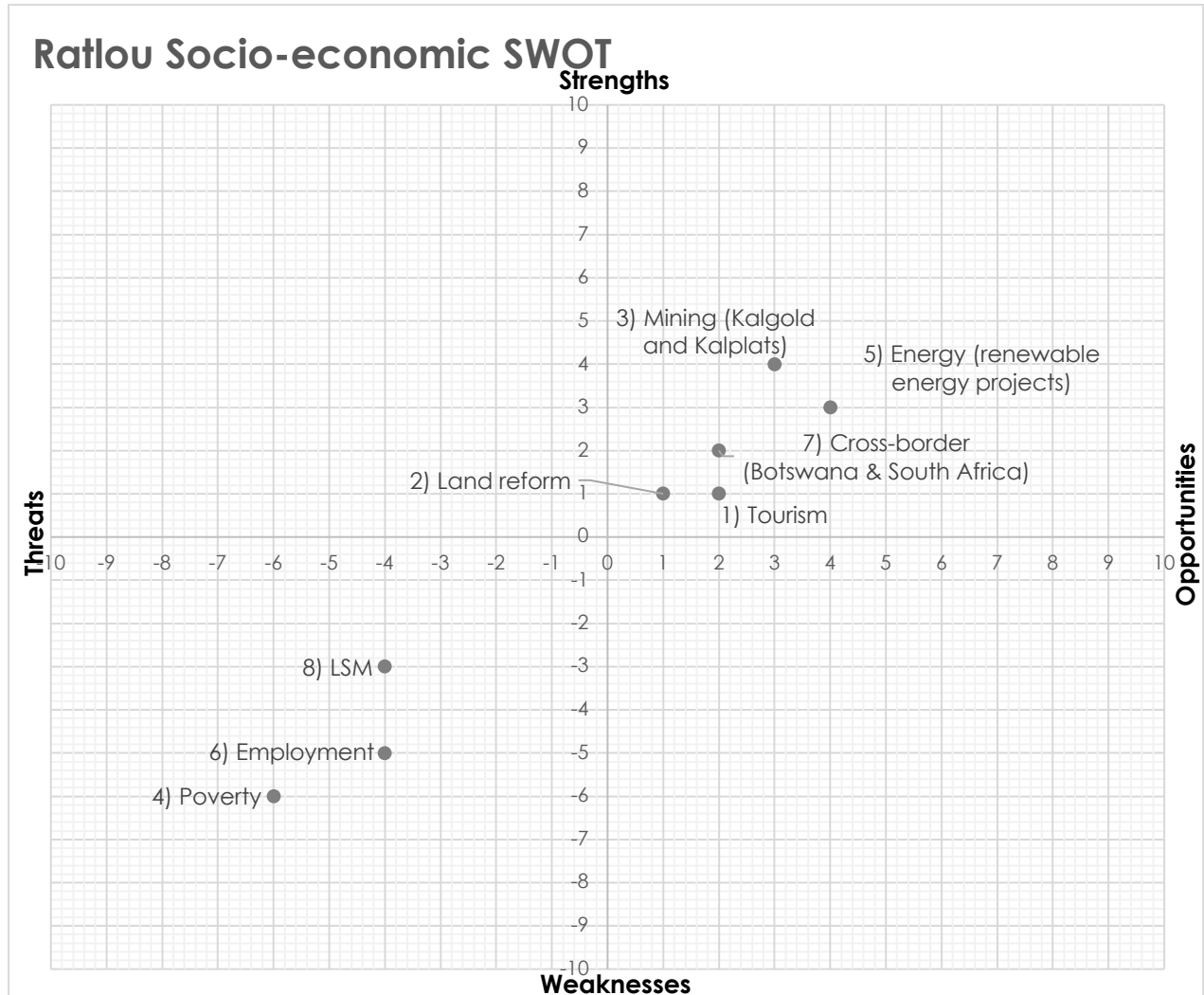


Figure 26: Socio-economic SWOT

1) Tourism:

The potential for tourism in Ratlou LM is relatively high. Its current strength lies in that there are a number of already established tourist and cultural areas. Places such as the Kraaipan battlefield museum and resorts/lodges around the Disaneng dam. However, a weakness of relying on tourism is when comparing the municipality to other locations such as neighbouring municipalities or the wider province. One can see that there are alternatives that are closer or more well-established that may be the first choice. The opportunity to overcome this is to provide an exceptional or unique attraction for people to visit. The Molopo river for example may be an opportunity during certain times of the year.

2) Land reform:

Land reform, from a socio-economic perspective, is largely seen as beneficial if properly implemented and followed through. At present a number of farm portions have been transferred across the entirety of the municipality. An opportunity exists for land reform to be implemented, not only in commercial agricultural areas, but also within traditional authority areas. This has the potential to create increased food security, security of tenure and financial security. However, this is threatened if there are irregularities or the process is slow.

3) Mining (Kalgold mine and Kalplats prospect):

The Kalgold mine, opposite to its biophysical assessment, is seen to be largely beneficial to the municipality. The mine employs a relatively large number of people (571 as of 2018). It is also in close proximity to major population centres such as Setlagole and Kraaipan. The opportunities for the mine include its outlook which as of its 2018 assessment report was very positive. The operation of the mine is expected to continue into the near future. However, as with any mine, the threat lies outside of the immediate physical area and rather in the commodity prices, in this case gold.

The Kalplats platinum prospecting operation close to Stella and Kalgold has been in process for a number of years. However, as of 2019 no mining is currently being undertaken. This is a potential future socio-economic benefactor to the wider municipality and region.

4) Poverty:

The persistence of poverty is a difficulty that any local government struggles to deal with. In Ratlou, this is spatially located within the rural settlements and main settlements. The difficulty in dealing with it has its own associated long-term threats to the municipality. Without major, realisable and meaningful change and tackling of poverty the risks of outwards migration and social unrest grow, leading to greater pressure being placed on the municipality to deal with the result and then the cause.

5) Energy (proposed renewable energy projects):

Proposed renewable energy projects have high potential benefits for the municipality. The municipality as a whole is suitable to renewable energy in the form of solar power. As such, there are a number of proposed projects in the north of the municipality and in smaller ones in the south. A weakness of these proposed projects lies in the size and status of the projects. The majority of them are small in generation capacity as well as only being proposed with none of them currently in development or operational. However, an opportunity to expand these in terms of employment and scale is there.

6) Employment:

Employment in the municipality is largely based around the agricultural areas. These areas are the clear leaders and drivers of opportunity for a large portion of the municipality. However, it is conversely rural, and the main settlements are areas with high concentrations of unemployment and a general lack of large scale, meaningful opportunity. The northern portion of the municipality has particularly low levels of employment. The threat posed by this system is with increasing levels of unemployment driving people to surrounding municipalities or further to large urban centres, placing pressure on already strained services. Another threat could be an increase in civil unrest as a result of a lack of opportunity.

7) Cross-border (Botswana and South Africa):

The international border between South Africa and Botswana is a potentially beneficial spatial element in the municipality. The border already has two Ports of Entry (PoE) with two large settlements surrounding them. Additionally, a number of settlements straddle the border and are mirrored on either side. However, the current number of illegal crossing points weakens the legal crossings positives and allows the movement of goods and people without proper checks. The potential to benefit from the border, however, does outweigh the negatives. Improved, legal movement of goods and people may allow for improved development in the border settlements. It could be encouraged as alternatives to busier PoE in the province and region.

8) Living Standards Measure:

Living Standards Measure (LSM) is a tool used to determine and classify the standard of living and disposable income. It is divided into 10 deciles, with LSM 1 being the lowest and LSM 10 the highest. It is determined by completing and stating what the respondent owns based on a set of variables. Certain variables carry more weight than others.

In Ratlou the LSM is generally very low across the municipality (LSM 2). This is generally a weakness as it indicates that the municipality has a lower level of access to certain goods and services. This state may be exasperated if service provision and the overall living standard of the municipality declines. This will be reflected in a lower LSM value.

4.2.3 Built environment

4.2.3.1 Background

The majority of settlements are small rural villages in the north and along the border with populations smaller than 5 000. The larger and more populous developments are located in the south, close to the railway line and the N18 such as Setlagole and Madibogo (refer to **Addendum C – Maps: 1 and 2 and Addendum D**).

Most of the development can be defined as residential, consisting of state-driven low-cost housing projects (small-scale) and individual housing development (largely informal). In some instances, they are supported by social amenities such as schools, community halls and clinics. Some state-driven housing projects have not been completed and have been left abandoned, such as in Madibogo and Disaneng.

Tribal land ownership is the dominant feature in the north and south. The state holds land in trust for communities and traditional leaders allocate land for settlement to households or individuals (refer to **Addendums A, B and C – Map: 22**).

The Ratlou LM owns a shopping centre in Setlagole which is currently under-managed. The aim is to rehabilitate this complex and turn it into a mixed-type development to leverage its commercial potential. The site has seen some development occur around it since 2011, but nothing to a large and impactful extent (refer to **Addendum D**).

The road network consists mostly of gravel roads that connect rural villages. The R375 and R507/R376 are formal roads that traverse the municipality diagonally and the N18 between Stella and Mahikeng is located in the south. The northern road (originating in Mahikeng) that runs parallel to the border is of importance due to it connecting the majority of the northern settlements. A railway line runs parallel to the N18 with six railway stations located within the Ratlou LMA. Internal roads within some of the settlements have been upgraded and tarred (refer to **Addendum C – Map: 28 and Addendum D**).

Electricity networks are concentrated primarily in the central and south with no infrastructure available in the north-western area. Villages that are best serviced can be found around Setlagole, Old Kraaipan, Mositlane, Maipeng and Lenganeng (refer to **Addendum C – Map: 29**).

The Ratlou SDF, 2012, defines the key challenges (need to be reassessed) of the Ratlou LMA as:

- Densification of scattered settlements;
- Fast-tracking of land reform;
- Optimisation of economic opportunities;
- Solutions for the current indigenous land use management system that is based on customary practices that are contrary to common law practices;
- Planning policies to address issues relating to security of tenure in villages;
- The development of an all-inclusive land use management system;
- The promotion of an approach that favours sustainable development; and
- Improved access to public transport.

Additional challenges include:

- Improving connectivity and integration between the northern and southern areas of the Ratlou LM;
- Improving the border linkages and systems; and
- Improved utilisation of the railway as an alternative to roads.

The 2017 - 2022 Ratlou IDP prioritises the development of a business plan for the upgrading of the Setlagole complex; support for cooperatives; the establishment of a brick-making project; and the development of an SMME support strategy and agriculture master plan (RLM, 2017 - 2022).

The Ngaka Modira Molema DRDP, 2016 (NMMD, 2016) identifies the potential of Kraaipan in the Ratlou LM to be developed as a potential agri-park to support rural economic transformation (refer to **Addendum D**). Such an agri-park will include farmer production support and targeted investment in agricultural development. Currently, little evidence of a noticeable agri-hub is present within Kraaipan. A prime location for one, would be around the railway stop and silo. It also notes the existence of livestock and piggery projects in the Madibogo and Setlagole villages (refer to **Addendum D**).

4.2.3.2 Built environment synthesis map

The built environment composite map indicating the location of current infrastructure, indicating elements such as:

- Movement Infrastructure
 - Roads
 - Rail
- Rivers
- Dams and water bodies
- Mines
- Healthcare facilities
- Education facilities
- Protected areas
- Boreholes
- Agricultural infrastructure
 - Silo's
 - Abattoirs

The use of three composite maps instead of one comprehensive one is to avoid cluttering and losing important information portrayed in the maps. Additionally, as stated prior, zoomed in maps of the main settlements are provided. This allows for a greater understanding of "what" is "where" within the Local Municipality (refer to **Built environment synthesis 3A, 3B and 3C**). For a brief understanding, the maps can be understood as the following:

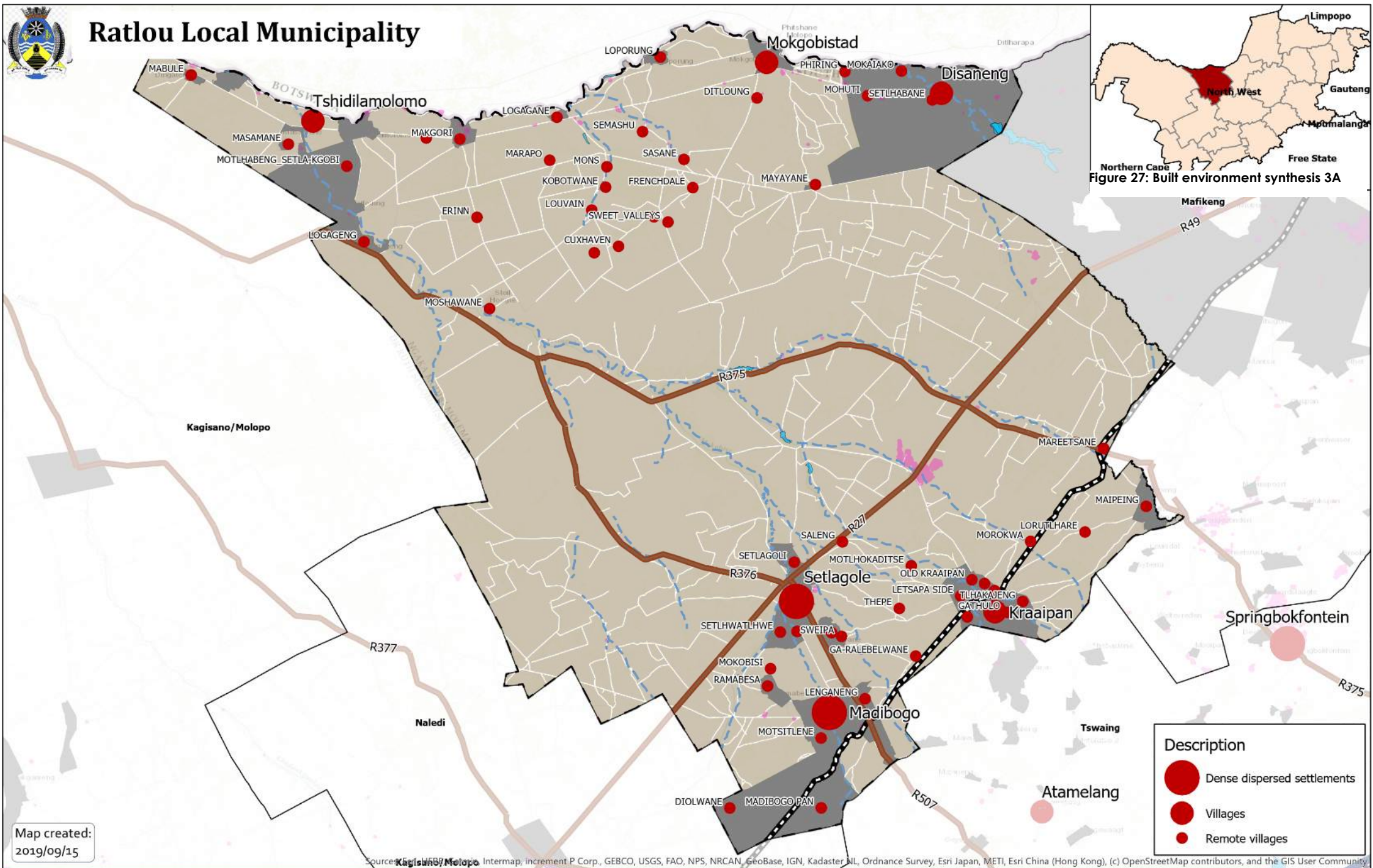
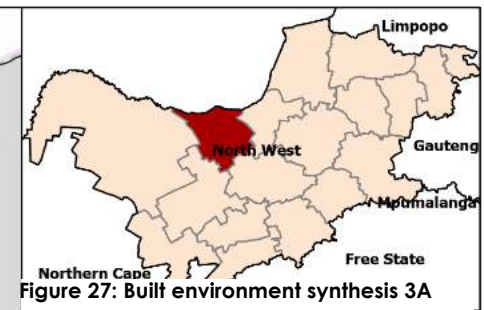
- **Built environment synthesis 3A:** This illustrates the nodes and their hierarchy, the main movement network (road and rail) and general town and settlement areas. The nodal hierarchy is based off the NSDF and CSIR Spatial Planner, the terminology and classification originate from these two sources.
- **Built environment synthesis 3B:** This illustrates the social services such as hospitals and clinics (public and private) and schools (primary, secondary and combined).
- **Built environment synthesis 3C:** This illustrates the agricultural infrastructure such as the abattoirs (poultry and red meat), silos and boreholes.

4.2.3.3 Synthesis

The synthesis of built environment data involved the evaluation of the current state of the municipality based around this respective field of analysis. It focuses on presenting a collective understanding of the SWOT analysis in the built environment realm. As part of this assessment, a matrix was developed to aid in assessing where certain elements lie and how they influence the current state of the municipality.



Ratlou Local Municipality



Description

- Dense dispersed settlements
- Villages
- Remote villages

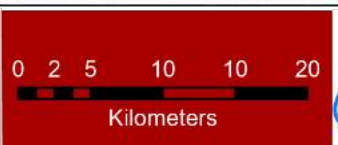
Map created:
2019/09/15

Source: Esri, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

Highway	Railway	Mining Landcover
Main Roads	Dams & water bodies	Town Boundary
Secondary roads	Rivers	

Built Environment: Composite Map 3A





Ratlou Local Municipality

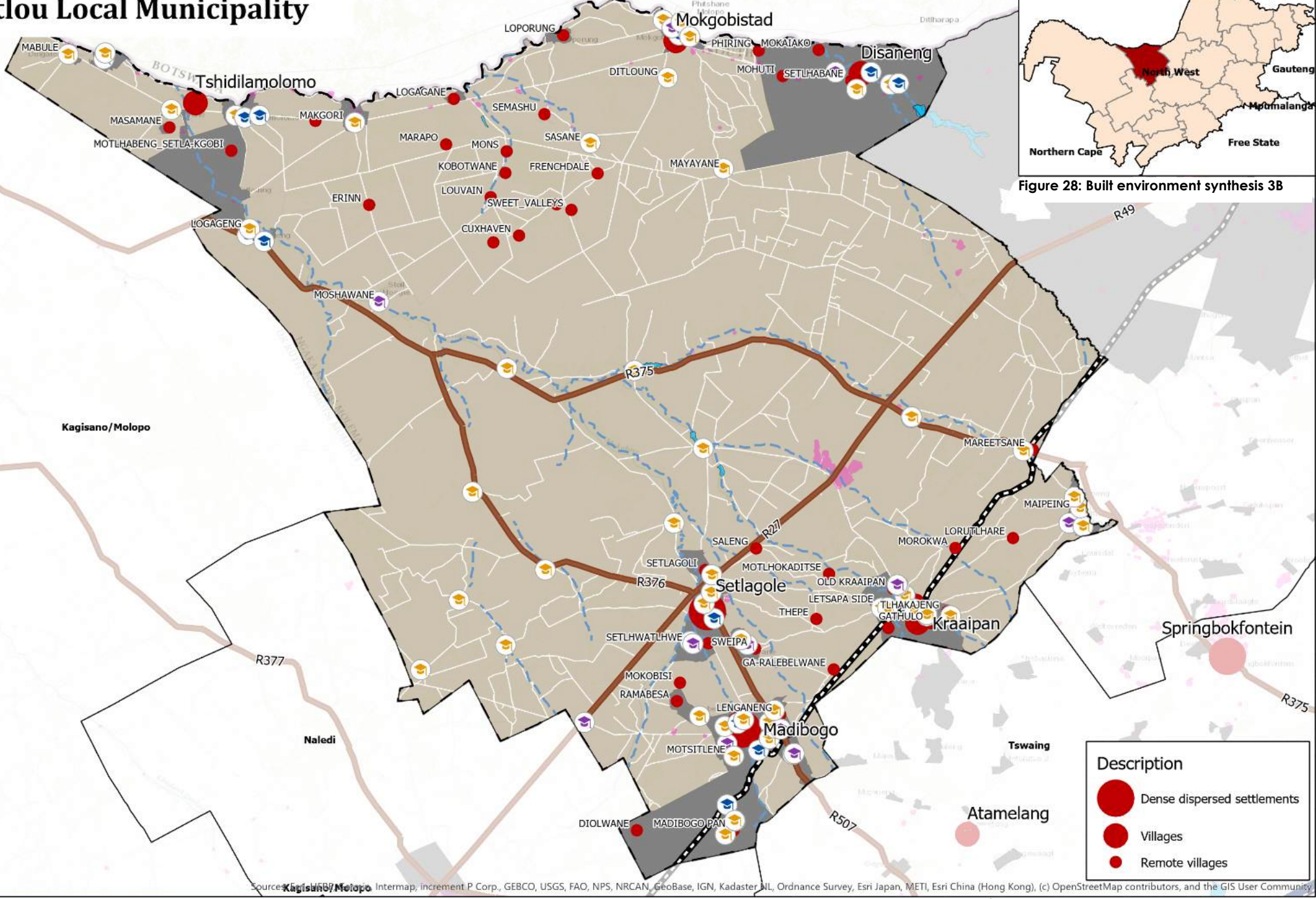


Figure 28: Built environment synthesis 3B

Description

- Dense dispersed settlements
- Villages
- Remote villages

Map created: 2019/09/15

Source: Esri, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

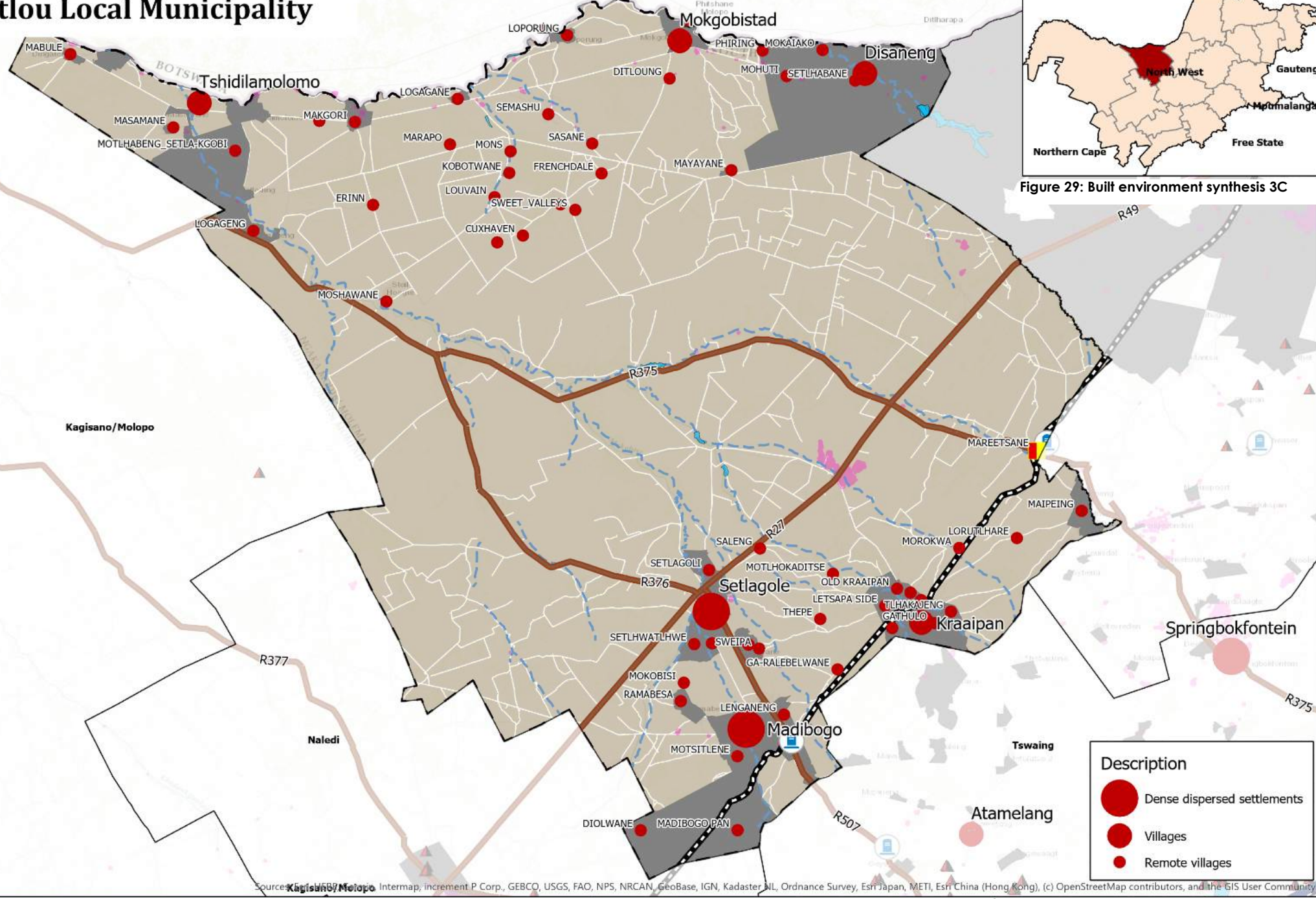
COMBINED SCHOOL	Main Roads	Rivers
PRIMARY SCHOOL	Secondary roads	Mining Landcover
SECONDARY SCHOOL	Railway	Town Boundary
Highway	Dams & water bodies	

Built Environment: Composite Map 3B





Ratlou Local Municipality



Map created: 2019/09/15

Source: Kagisano/Molopo, Intermap, Increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LEGEND

- Red meat abattoirs
- Poultry abattoirs
- Silos
- Bore holes
- Highway
- Main Roads
- Secondary roads
- Railway
- Dams & water bodies
- Rivers
- Mining Landcover
- Town Boundary

Built Environment: Composite Map 3C

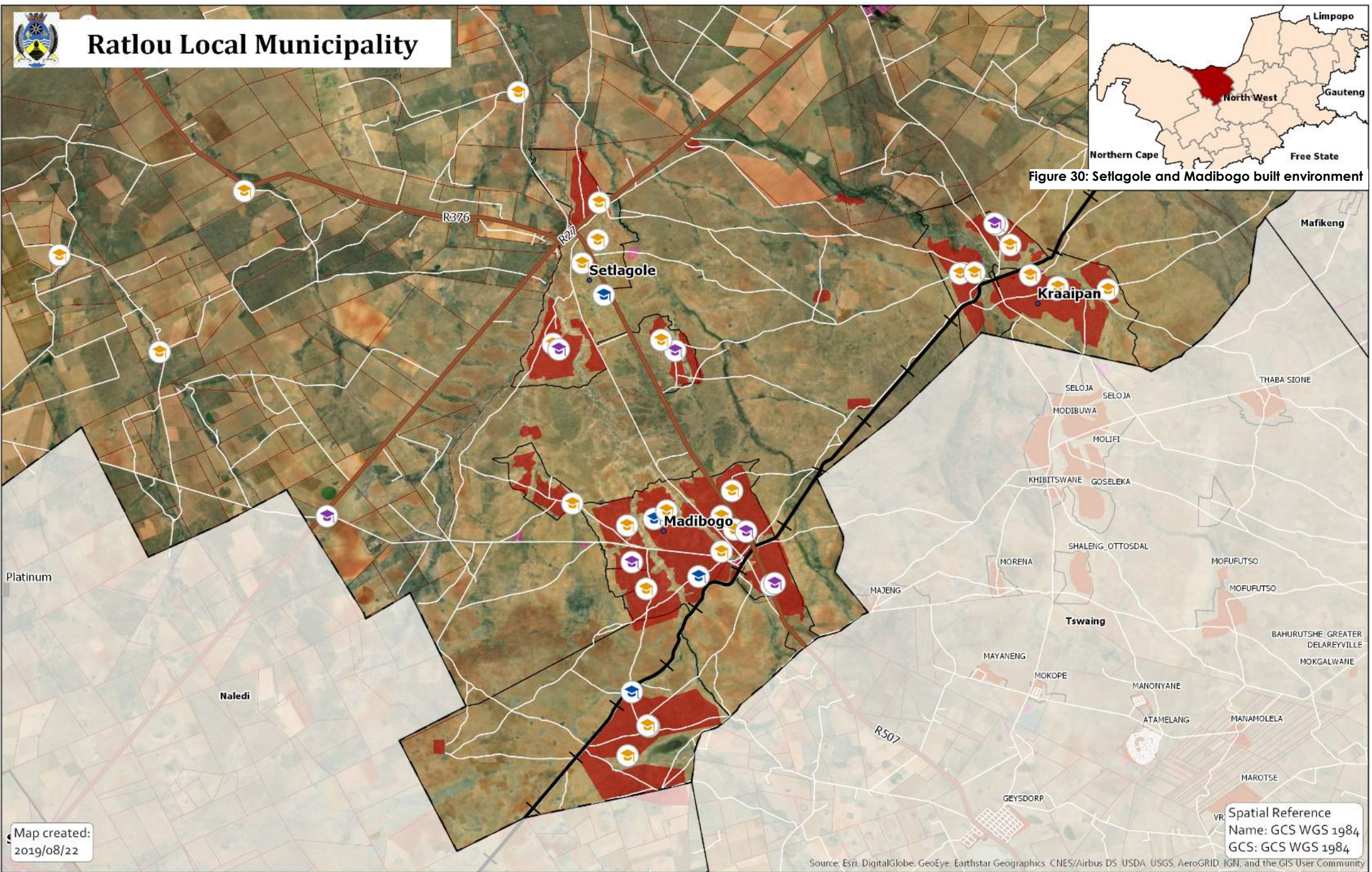




Ratlou Local Municipality



Figure 30: Setlagole and Madibogo built environment



Map created: 2019/08/22

Spatial Reference
Name: GCS WGS 1984
GCS: GCS WGS 1984

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Erven	Main Roads	Farm Portions	SECONDARY	Silos
Settlements	Railway	COMBINED	NW_Markets	Poultry abattoirs
Towns	Mines	PRIMARY	Bore holes	Red meat abattoirs
Secondary roads	Mining Landcover			

Built Environment: Kraaipan & Madibogo

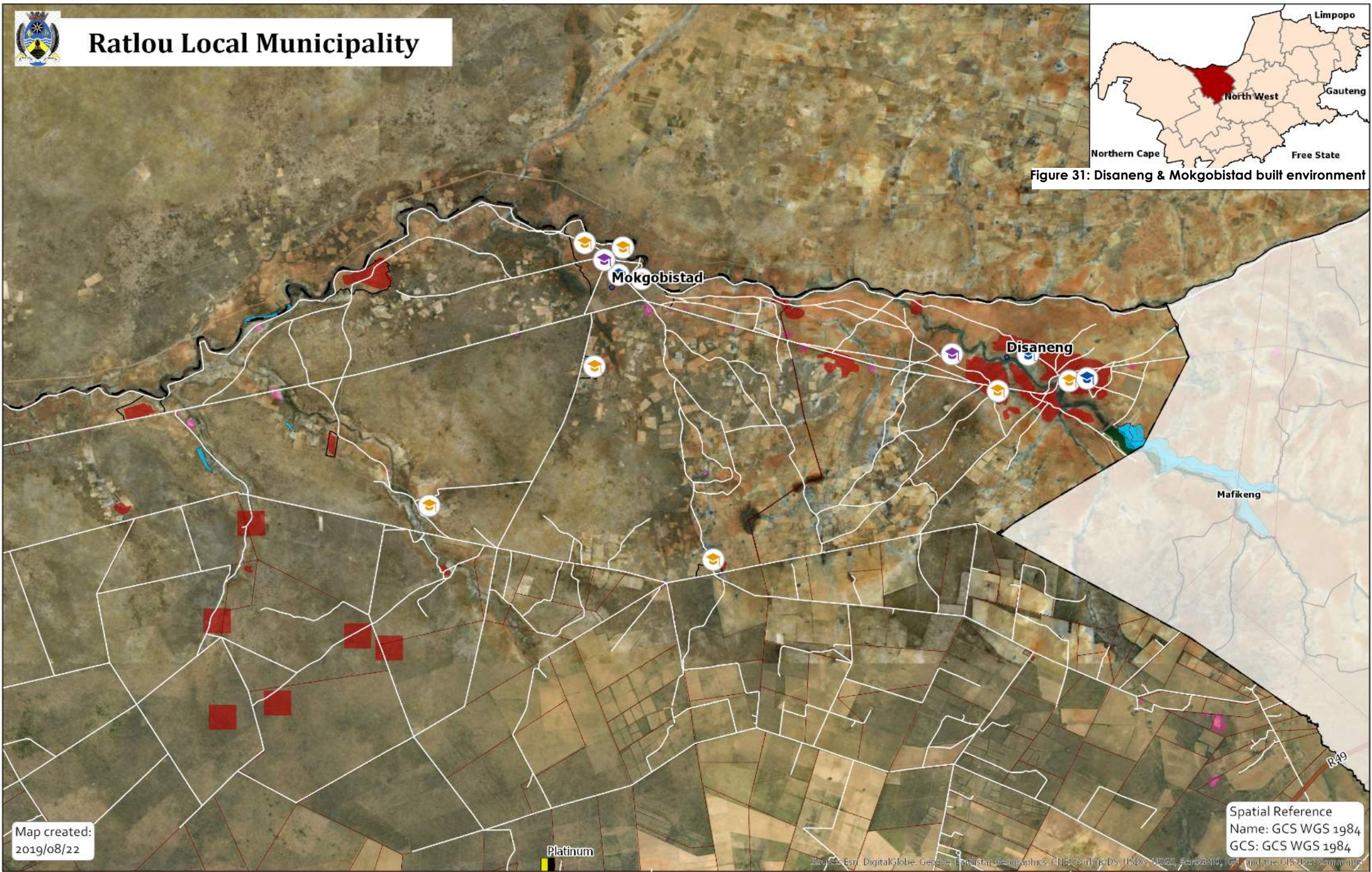




Ratlou Local Municipality



Figure 31: Disaneng & Mokgobistad built environment



Map created:
2019/08/22

Spatial Reference
Name: GCS WGS 1984
GCS: GCS WGS 1984

LEGEND

Secondary roads	Mines	COMBINED	NW_Markets	Poultry abattoirs
Main Roads	Mining Landcover	PRIMARY	Bore holes	Red meat abattoirs
Dams & water bodies	Farm Portions	SECONDARY	Silos	Settlements

Built Environment: Mokgobistad & Disaneng

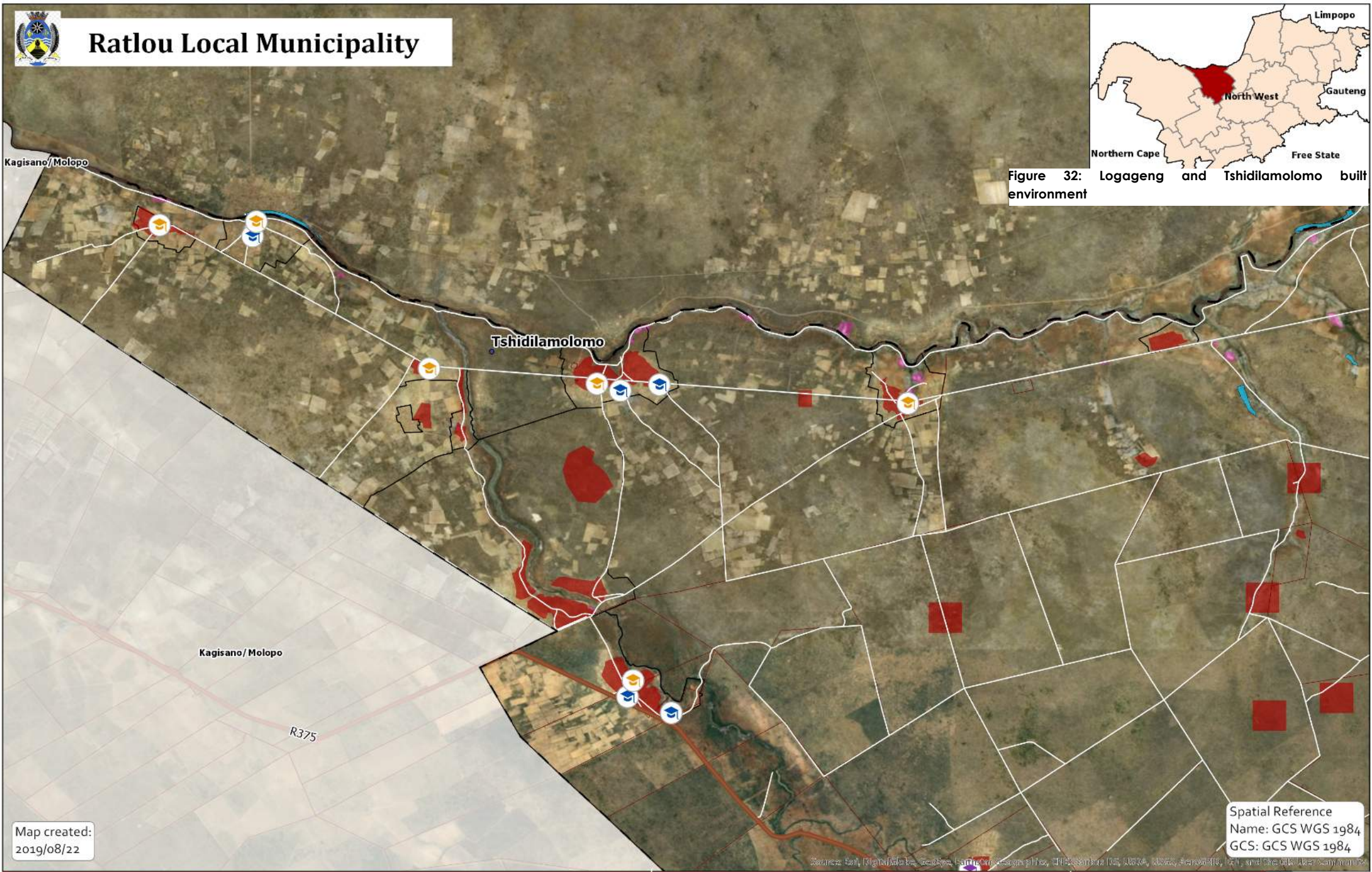




Ratlou Local Municipality



Figure 32: Logageng and Tshidilamolomo built environment



Map created:
2019/08/22

Spatial Reference
Name: GCS WGS 1984
GCS: GCS WGS 1984

LEGEND

- Secondary roads
- Main Roads
- Mining Landcover
- Farm Portions
- COMBINED
- PRIMARY
- SECONDARY
- NW_Markets
- Bore holes
- Silos
- Poultry abattoirs
- Red meat abattoirs
- Settlements

Built Environment: Tshidilamolomo



TABLE 14: BUILT ENVIRONMENT SWOT SYNTHESIS

SPATIAL ELEMENT	STRENGTH	WEAKNESS	OPPORTUNITY	THREAT	X AXIS	Y AXIS	REFERENCE	GEO-LOCATION
1) Road network	National road with some tarred interconnecting roads.	Large majority of the main and provincial roads are untarred and of a poor quality.	Network is in place. The quality of the roads can be improved to deliver a greater return (North-South connection).	Continued degrading to tarred roads and deterioration of untarred roads.	-2	1	Map 1: Locality and Google earth map - Visual observation	Entirety of the municipality
2) Railway network	Railway line connects main towns and settlements in the east of the municipality.	Utilised by a single industry (agriculture) and does not connect to northern areas of the municipality.	Diversification of the uses on the network.	Deterioration of the network leads to agriculture in the municipality becoming over reliant on the N18 (overburdening).	1	-1	Google earth map - Visual observation	Eastern border of the municipality
3) Main settlements	Some level of activity (formal and informal). Service provision is somewhat adequate in the larger towns (settlements). Setlagole industrial area	Largely dispersed in terms of spatial form. Sprawling, low density settlements.	Containment of sprawl and densification can enable improved service provision. Expansion of Setlagole industrial area.	Unmanaged growth can lead to large sprawling, difficult to manage settlements.	2	1	Google earth map - Visual observation	Northern and southern portions of the municipality
4) Settlements (rural settlements)	Densely located in the northern area of the municipality.	Small, isolated and lack significant infrastructure.	Integration and improved connectivity of these settlements through movement routes.	Lack of basic service provision and opportunities leads to large scale outwards migration of the municipality.	-2	-5	Google earth map - Visual observation	Northern portion of the municipality
5) Agricultural infrastructure (silos, mills and Agri-park)	Three large silos located in the east, along the railway and support units located in close to large agricultural areas and settlements.	Distance to small-scale agriculture and the ability to support them due to the distance. Some of the infrastructure is not in operation.	Provides for storage services and a base for any new commercial and small-scale agricultural development. Reactivation of infrastructure.	Largely based along railways. If railways deteriorate their usability and usefulness declines rapidly.	1	1	Google earth map - Visual observation and North West Agri park data	Southern portion of the municipality
6) Water		Water is largely dependent on boreholes and water tankers.		Aquifer depletion due to overuse in agriculture and human use.	-3	-3	Map 15: Source of water	Entirety of the municipality
7) Waste removal		The overwhelming majority of the municipality lacks refuse removal. This leads to informal waste dumping sites or burning of waste.		Informal waste dumping sites or burning of waste places pressure on environment.	-5	-4	Map 27: Refuse Removal	Entirety of the municipality
8) Energy		Northern areas lack access to electricity for cooking. Results in the use of other fuels such wood, animal waste etc.		Large scale removal of burnable materials such as wood. Causes damage to environment.	2	-1	Map 29: Electricity	Entirety of the municipality
9) Educational facilities	Grouped in main settlements and rural settlements. Areas with generally higher populations.	Capacity and reach of facilities will vary.		Quality of the facilities could deteriorate with increased usage. Capacity could be met if migration towards to the main settlements increases.	-1	1	Map 28: Educational facilities	Entirety of the municipality

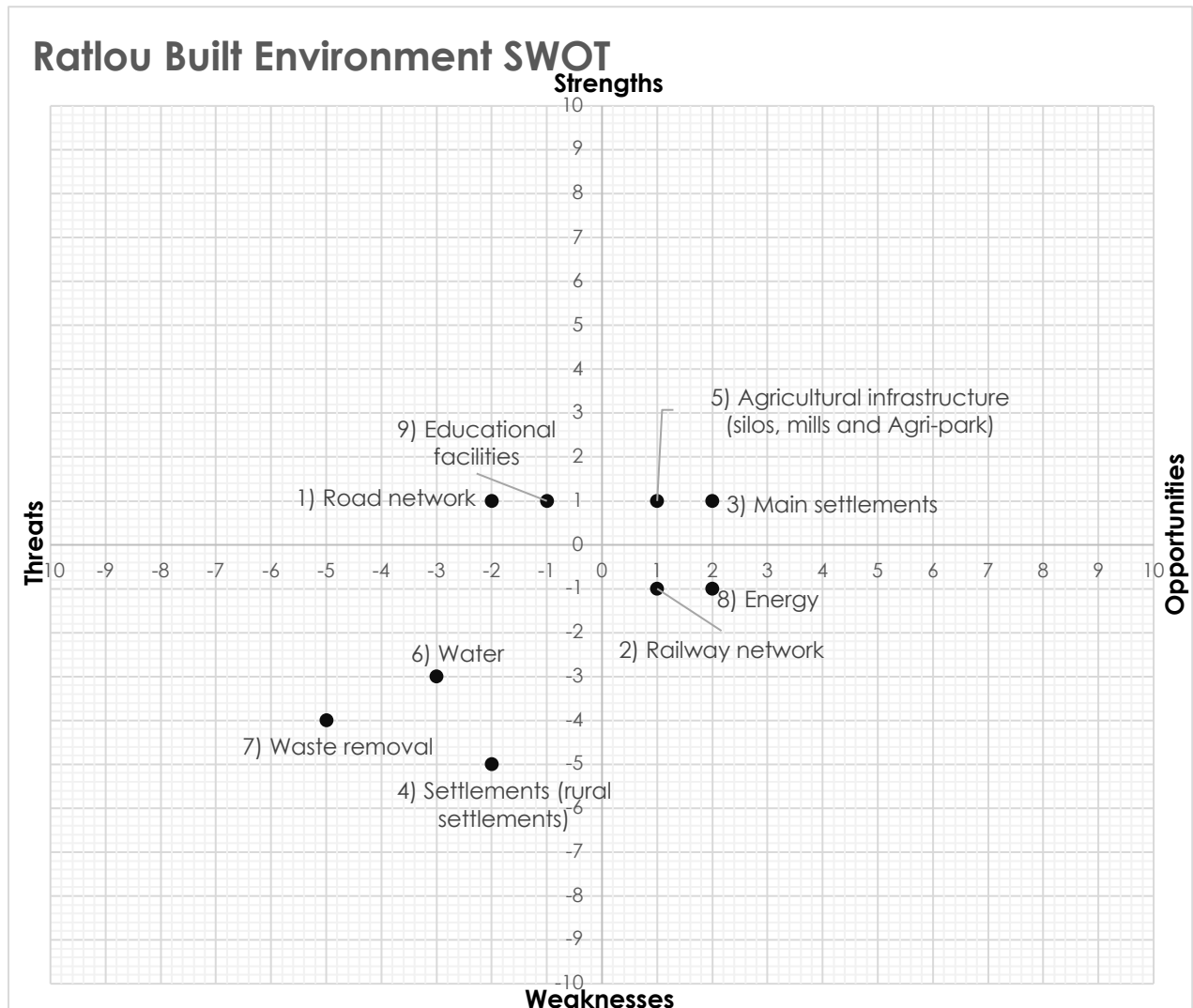


Figure 33: Built environment SWOT

1) Road network:

The road network within the municipality is somewhat established in the southern and eastern portion of the municipality. The road network is based largely around the N18 as a central route with all lower order routes stemming from it. A weakness of the network, however, is that a large number of the main and regional routes are untarred or of poor quality. This does, however, present an opportunity in that if these routes are improved and connected a well-connected road network would be established. The main threat to the road network remains, as with any road, the lack of maintenance on both tarred and untarred roads.

2) Railway network:

The railway network is a small but significant infrastructure component in the east of the municipality. The network is significant due to its connections with the main settlements of the municipality. However, this network's main weakness is its "single" use nature in that the agriculture is the only large-scale user. An opportunity does lie in this: with the expansion of the types of users on the network its sustainability and use level may increase. An underlying threat that has led to the closure of many railways in the country is the lack of maintenance. If the railway line declines rapidly, current goods transported on it could move to the road, thus placing more pressure on the already fragile road network.

3) Main settlement:

The main settlements of the municipality currently have potential to improve the overall condition of the municipality. Setlagole and Madibogo currently have a large potential with the Setlagole industrial area providing a unique opportunity within the municipality. The settlements feature some level of formal and informal activity with varying levels of service provision. These settlements are, however, spatially inefficient due to the general low-density sprawl. An opportunity to improve the main settlements is through the management of sprawl by containing where new development should occur. In tandem with this, densification should be used in certain areas. A threat faced by the settlements, as with many settlements in general, is if service provision deteriorates or no new real opportunities are created a large number of people will seek opportunities outside of Ratlou.

4) Settlements (rural settlements):

The rural settlement of Ratlou LM are largely located in the north of the municipality along the Botswana border. They are generally close to one another and connected by a main route. They are, however, generally small in population and lacking significant infrastructure. These settlements do have opportunities for improvement, such as improved integration and connections between each settlement would improve access and the movement of goods, particularly around PoE. The primary threat faced by the rural settlements, as in the main settlements, is if service provision worsens, the risk of greater outwards migration increases.

5) Agricultural infrastructure:

The agricultural infrastructure in Ratlou is established in the eastern portion of the municipality, whereas little to no large-scale infrastructure exists in the west. The eastern infrastructure consists mainly of silos and Farmer Production Support Units (FPSU). It is important to note that not all of this is currently in operation such as the silos in Madibogo and Kraaipan. This infrastructure is a strength as it allows for the agricultural sector to have quick access to its required supporting infrastructure and systems. It is also an opportunity as it provides a base from which any new agricultural development, both commercial and subsistence, can build from. The system, however, does have a threat in that it relies heavily on the railway network. If a major decline occurs in that network, it could lead to serious stress on the agricultural infrastructure and industry as a whole.

6) Water:

Water provision and supply within Ratlou LM is largely viewed as a constraint. This is due to its current weaknesses around its dependency on boreholes and water tankers for supply, particularly in Setlagole, the municipalities largest settlement. An additional element of this is a constraint, due to the reliance on groundwater. The threat of aquifer depletion, due to constant overuse, can occur if water usage is not monitored effectively and replenishment rates are not considered.

7) Waste removal:

The removal of waste in the municipality is generally low. This means that current waste disposal systems in rural areas and informal areas are largely hap-hazard. This has led to the creation of illegal dumping sites and personal waste areas where it is burned or disposed of incorrectly. The threat of this is that illegal waste dumping sites and burning of waste may lead to widespread pollution of environmental systems.

8) Energy (electricity for cooking):

The provision of electricity in the municipality is generally high in the central agricultural areas. However, the provision in the north and around the main and rural settlements is generally very low. This can be a threat due to the continued use of other resources for cooking such as wood, animal waste and the like. Wood, in particular, is damaging as it is often sourced from the immediate surrounds and places vegetation and the environment under pressure.

9) Educational facilities:

Educational facilities are highly concentrated within the main and rural settlements. This is mainly due to the higher populations within these areas. A weakness, however, is that the capacity and reach of these facilities may vary. A threat posed is also related to increase movement towards the main settlements. With increased numbers of people moving the overburdening of the facilities may occur if little additional capacity is added.

4.3 Settlement frameworks (previous SDF)

4.3.1 Setlagole and Madibogo framework

The use of the term clusters is aimed to build upon the previous SDF (Mokgalagadi Consulting, 2012). Information utilised in this section from the previous SDF is still relevant and useful.²

The southern area contains Setlagole and Madibogo. One focus area is the establishment of a commercial / retail hub at the Setlagole intersection supported by village development corridors (refer to **Addendum D**). The larger area contains the following settlements:

- Diolwane;
- Madibogo Pan;
- Madibogo (Mositlane and Ramabesa);
- Setlagole (Thutlwane);
- Kraaipan (Old and New);
- Maipeng;
- Batho-Batho;
- Marretsane; and
- Morokwa.

The Ratlou SDF, 2012, also proposed the establishment of four development nodes:

- The **Setlagole Commercial Hub** (refer to **Addendum D**) on the N18 trans-frontier corridor. This regional node will have high transportation exposure that contributes to the development of a retail destination that expands on existing commercial, business and government services. This focus area, around the hub, has been slightly successful. Some additional development has occurred over the five years but not extensively. The aim must be to develop this hub as a gateway to the Tswaing LM and Delareyville. It is significant because it connects the two largest villages in the southern region. The Ratlou LM Building and adjacent library can become an emerging civic centre. The **Madibogo Retail Node** which includes the provision of infrastructure for commercial development, social services and public amenities, remains largely inactive and stagnant with little to no additional development occurring over the last five years (refer to **Addendum D**).
- The **Kraaipan Development** which should be accompanied by a Kraaipan Local Area Plan (Kraaipan LAP) that incorporates local heritage assets, social services and public amenity infrastructure (refer to **Addendum D**).
- The **Mareetsane Gateway Node** which builds on its proximity to commercial agriculture and rail node opportunities. The Mareetsane node has received a large amount of focus through IDP projects such as road, taxi rank and clinic upgrading (refer to **Addendum D**).

Four development corridors are also proposed (needs to be reconsidered) in the Ratlou SDF, 2012:

- The **N18 Trans-frontier Corridor** - an existing provincial corridor which links Vryburg with Mahikeng and offers opportunities to Ratlou to access the flows of goods and services (refer to **Addendum D**).
- The **Setlagole - Madibogo Corridor** - as a "*civic corridor*" which offers social service investments and recent low-cost housing developments. Corridor remains largely non-existent, with only Setlagole node (municipal offices) showing growth (refer to **Addendum D**).
- The **Kraaipan - Setlagole Corridor** - which can grow into a "*heritage corridor*" and taps into potential heritage destinations and social services infrastructure. Limited evidence of any growth or emergence

² Mokgalagadi Consulting – Architecture, Town Planning and Project Management

of the corridor. Rather a Madibogo - Kraaipan corridor centred on the railway line (refer to **Addendum D**).

- The **Mareetsane - Setlagole Corridor** as a main route linking Mareetsane, Setlagole and Sannieshof taking into account the presence of commercial farming and the intersection with the rail link (refer to **Addendum D**).

The Ratlou SDF, 2012, places an emphasis on the importance of a well-developed and well-maintained road infrastructure that are also linked to the railway line.

The N18 is the national road which traverses the south-eastern parts of Ratlou. This is the spine of the province's Western Frontier Spatial Development Initiative and links the centre of Mahikeng through Ratlou to Vryburg.

The second element is the road running along the northern boundaries of Ratlou in close proximity to the Botswana border. This road links Mahikeng with the northern parts of the municipality.

Road R507 links the N18 through Thutlwane and Madibogo to Geysdorp and Delareyville in the Tswaing municipality.

Another important road stretches from the Kalgold gold mine south eastwards through Kraaipan with another linking Madibogo and Madibogo Pan with Vryburg.

It also notes that a road linking Disaneng and Setlagole must be seen as "an absolute imperative" and should form part of any future plans. However, no such direct connection exists between Disaneng and Setlagole nor is such allocated for in the current IDP (RLM, 2017 - 2022).

Implementation framework:

The Ratlou SDF, 2012, recommended a framework for the implementation of its proposals (needs to be reconsidered). This include:

- Direct investment by the municipality and funded through municipal infrastructure projects;
- The drafting and policies and guidelines which provides incentives to the private sector and other stakeholders;
- Integration of the SDF and the IDP;
- The development of a land use management system for alignment purposes; and
- The council should provide political direction and oversight while the municipal manager must be responsible for implementation.

The proposed nodes are also included in the North West SDF, 2017.

The North West SDF, 2017, also presents development guidelines for the Ratlou LM, which include:

- Housing focus must be on backlog eradication;
- Rural towns and villages must be integrated into the urban system by promoting and enhancing rural-urban linkages;
- The delivery of basic services must be focused on core areas to create agglomeration advantages and attract people rather than dispersing them throughout a rural municipality;
- The Setlagole commercial hub must become a catalyst for local economic development;
- The future focus of development must be on Setlagole rather than diluting investment potential;
- The potential of tourism nodes must be unlocked;
- Accessibility must be increased throughout the district;
- The focus must be on densification rather than the dispersal of residential and commercial activities;
- High-value arable land must be protected;
- Priority must be given to skills development in the agriculture and trade sectors;

- Water infrastructure must be prioritised; and
- The establishment of SMMEs must be promoted to create employment opportunities.

4.3.2 Disaneng and Mokgobistad framework

The northern area contains Disaneng and Mokgobistad, with a horizontal corridor linkage to Mahikeng. This will tap into the tourism potential of the Disaneng Dam, which has unfortunately not seen its full potential reached, with limited development occurring around the dam, with the exception of two resorts (refer to **Addendum D**). The larger area comprises the following settlements:

- Loporung;
- Mokgobistad;
- Maeyaeyane; and
- Disaneng.

4.3.3 Logageng and Tshidilamolomo framework

The north western area contains the settlements of Logageng and Tshidilamolomo. This area is connected to the southern area via the R376 and R375. This area is largely untapped with a number of smaller villages and settlements spread throughout. It also features one the two PoE in the LM. The larger area comprises the following settlements:

- Dingateng;
- Mabule;
- Masanane;
- Matloding;
- Logageng;
- Tshidilamolomo;
- Makgori;
- Logagane;
- Semashu; and
- Sesane.

4.3.4 Central region

The central area includes the establishment of a transportation corridor, linking the area to the Setlagole hub in the south and Mokgobistad/ Disaneng in the north. The focus will be on incremental land reform for small scale commercial and subsistence agriculture. Unfortunately, the linkage between Setlagole and Mokgobistad/Disaneng has not materialised. Land reform has also been slow, with one large farm successfully transferred and numerous land claims remaining unresolved (refer to **Addendum C – Map: 5 and Addendum D**). This development zone contains the following settlement:

- Steilnek / Steil Hoogte.

4.4 Synthesis and lessons learnt

4.4.1 Key outcomes

From all the sources mentioned prior (census data, maps, interviews and previous policy documents) a comprehensive overview and synthesise was produced with extracted sections from relevant sources.

- Although there are quite a few farming operations, most use minimal number of labourers, except the ground nut farmers. Farmers have scaled back on the use of manual labour because of strict labour laws and minimum wages. There are questions about the lifespan of the Kalgold Mine. There is a general lack of schools in the area, forcing parents to put their children in boarding schools.
- Medical services are also not up to standard in this area.
- In terms of the agricultural activities, a problem for a number of farmers is the high transportation cost of products. The cattle are mostly sold at auctions in Vryburg. Maize goes to either Delareyville, Vryburg or Lichtenburg.
- There is a lack of access to sufficient retail facilities for basic goods. Stella in Naledi LM has a few shops, but residents have to travel far to either Vryburg or Mahikeng to do their shopping. This is also true for other social needs such as registering of births, licences, and the like.
- Tourism could become a large-scale job creator in this area because it is perfect for game farming. The condition of the roads in this area, specially gravel roads are a hurdle to this and should be a priority.
- The objective of the framework is to align strategic development priorities and approaches to spatial development to create a platform for sustainable development. It is a critical component of the Integrated Development Plan and guides projects funded through the municipal budget.
- Spatial planning is used "*as a spine for coordinating all service delivery decisions.*"
- The SDF, 2012 (RLM, 2012) states that the rural nature of the Ratlou LM, combined with its isolated location, pose specific challenges to planning and development. Scattered village settlements have limited capacities to build on low levels of economic development potential.
- In the absence of regional growth focal points within the municipality the flow of goods and services are primarily aligned to major settlements outside of Ratlou, most notably Mahikeng, Delareyville and Vryburg. This limits investment and expenditure within Ratlou's own village settlements.
- The objective must, thus, be to retain as much of the goods and services within the Ratlou LMA. Such retention of goods and services will promote the development of villages through their own internal energies, decrease reliance on municipal intervention and subsidisation.
- To achieve this, Ratlou must promote the development of "*destinations*" within the municipalities which consist of nodal points on which strategic developments and interventions can be focused.
- Moreover, the nodes must then be connected through the establishment of transportation linkages which serve as development corridors between nodes.

4.4.2 Matrix and final synthesis graph

The final synthesis SWOT analysis (**Figure 34: Final Synthesis SWOT of Ratlou Local Municipality**) indicates that a number of areas in the three spheres of analysis lie along a trend of being threats and weaknesses, with a smaller subgroup of this having the ability to become opportunities. The second main group are elements that are both strengths and opportunities. This group is a crucial area to build from when examining proposals, however, attention needs to be paid to those that straddle the line between being beneficial and nonbeneficial as they fluid. The third important group is those that are both weaknesses but also opportunities. This group can be leveraged, some with more ease than others, upwards into the most favourable strength and opportunities quadrant. The last and smallest group is that of the strengths and threats group. This can function in a similar way to the third group.

4.4.3 Interrelation of elements

The synthesis SWOT table (**Figure 35: Interrelation SWOT of Ratlou Local Municipality**) indicates the interrelation of a number of elements described in **Figure 34: Final Synthesis SWOT of Ratlou Local Municipality**. This table aims to show that although elements were compartmentalised into the three respective categories, some were examined in each and do relate and have an impact in a varied manner.

In order to show the interrelation of elements a simple "connect the dots" method was utilised. This simply aims to draw a line between the two related elements. The line used to connect the two points varies in thickness depending on the level of interrelation exhibited between the two. The type of line used, such as solid, dotted, hashed etc. does not indicate a varied value of interrelation and is purely used to illustrate the differences between the lines.

Ratlou Synthesis SWOT

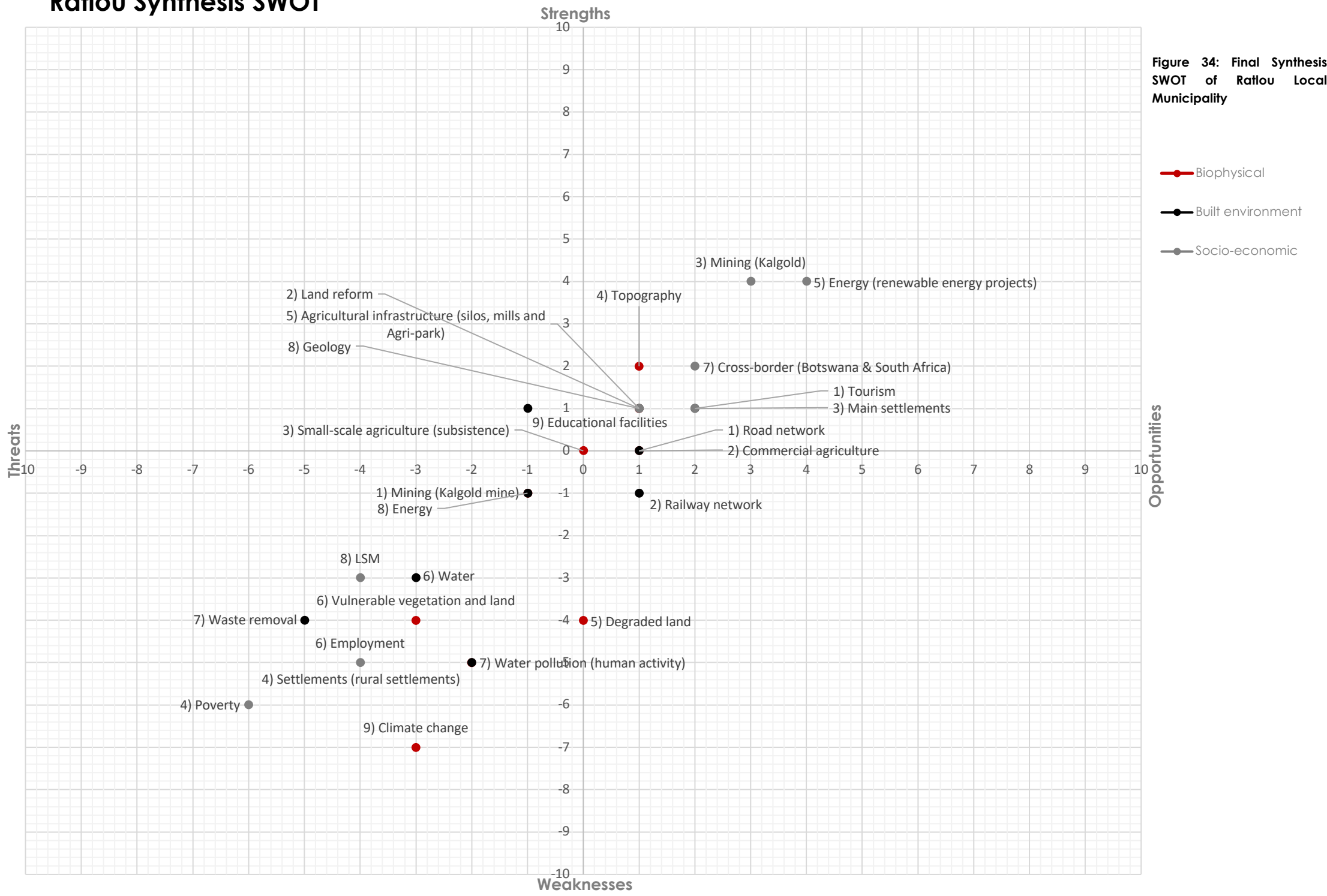
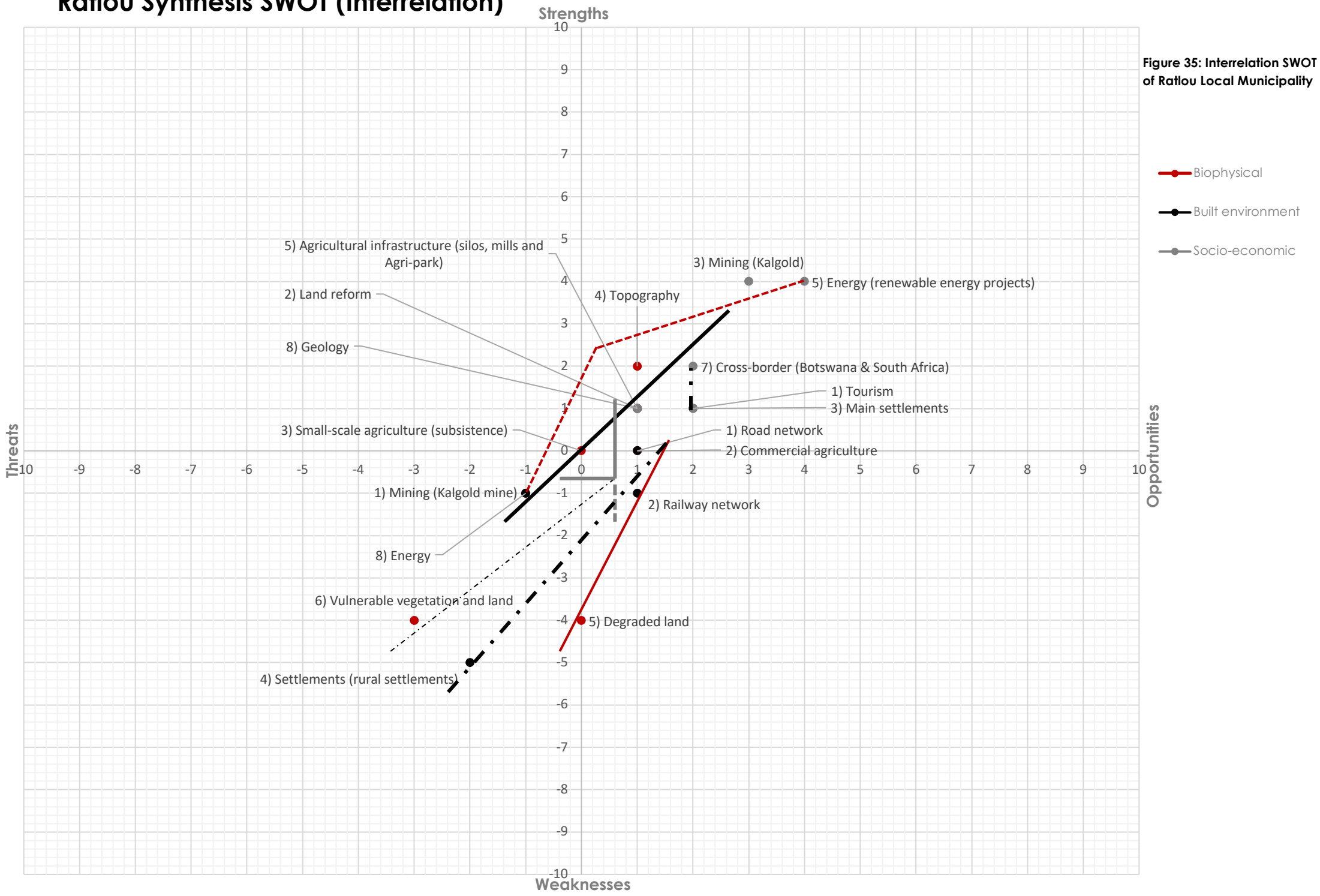


Figure 34: Final Synthesis SWOT of Ratlou Local Municipality

Ratlou Synthesis SWOT (Interrelation)

Figure 35: Interrelation SWOT of Ratlou Local Municipality



5 SPATIAL PROPOSALS

5.1 Vision

5.1.1 Visioning process and process imperatives

As stated in the SDF guidelines, 2017, the purpose of Phase 1 on "Policy context and vision directives" is not to present a final vision statement and a final spatial vision for the study area, but rather to present a draft vision in the form of preliminary and draft vision directives, primarily derived from the policy context and analysis (Phase 1).

The purpose of these vision directives is:

1. Present some sense of future development thinking and spatial imaging and direction, specifically, pertaining to the policy context; and
2. Ultimately set a basis and platform for the consultation process to follow.

The final vision (in the form of a vision statement, as well as a spatial illustration of the future development direction (spatial vision)), will only be dealt with in Phase 3 of the process (refer to diagram on page 72 of the SDF guidelines, 2017 (NDRDLR 2017)).

It should further be noted that in line with the SPLUMA, 2013, requirements, as well as the above-mentioned guidelines, the final vision will also have to be informed by the inputs from communities, stakeholders and all Interested and Affected Parties. This consultation phase will also be dealt with through the Representative Forum in Phase 3. To this end, it is important to emphasise that the municipality:

1. Will be responsible to convene such a meeting of the Representative Forum;
2. Will ensure that relevant and important stakeholders are invited to such a meeting; and
3. Will convene such a meeting at the inception of Phase 3, in order to align tasks of this phase with the target dates and time frames of the overall project.

The purpose of this Representative Forum meeting is:

1. Inform the various representatives and stakeholders of the progress on the MSDF;
2. Present the most important content relating to policy context, and the analysis findings and trends relating to the biophysical, socio-economic and built environment components; and
3. Lastly, obtain inputs on the draft vision directives and to involve the communities and stakeholders in a visioning process to arrive at a final vision.

The involvement of the communities in this visioning phase is imperative as the vision needs to be inspired and crafted by the community and not the professional team. Various innovative and very effective options and tools are being used with great success to do such visioning exercises in a very short space of time. Such options will be presented for consideration to the PSC.

5.1.2 Rationale for vision directives

As stated previously, the vision directives are a first attempt to provide some sense of the future exploration of the study area and a basis for future consultation. It should further be noted that these initial directives are mainly informed by the policy context analysis (Phase 1), as well as the analysis of the various components and the related spatial challenges and opportunities (Phase 2).

In any scenario planning, it is often custom to unpack the so-called "low road" or bad scenarios, as well as the "high-road" or good scenarios.

In visioning processes, the purpose of the vision is rather to present a statement or picture of the ultimate desired state, the possible dream, or the best-case, future scenario. The reasons are obvious and primarily attempt to inspire the communities and stakeholders and institutions to align efforts and to work towards a common goal and an ultimate, desired end-state. To this end, the initial future vision directives will respond to good and ultimate future possibilities and opportunities and will not focus on the bad case scenarios and possible threats. This will however be addressed in the spatial proposals and strategy phase (Phase 3).

5.1.3 Towards specific vision directives

If all the role-players, communities, stakeholders and institutions, involved in the future planning, development and management of the Ratlou area, can commit themselves to joining hands and to work jointly towards the desired future state, this unique area and its people, spaces and places can in future be transformed into a quality, well-functioning tourism, economic and agricultural hub of the north-west province (and country).

Through spatial interventions like business centres, digital hubs and village enterprises, major new economic development and investment will be attracted to this region and the local areas.

Such new investment will inevitably stimulate and support various current and new small, medium and micro enterprises in the rural areas and create marketplaces where people can trade their products.

The Local Municipality of Ratlou, by 2025, will be a place where connections both internally and externally are established and nurtured.

Ratlou will become a place in which the future of South Africa's green energy future can begin. This in turn will spur and ignite new and alternative forms of e-education, e-medicine, e-governance, smart transport, etc., and improve communication and access to opportunities.

Ratlou has the potential to play its part in placing South Africa on a green path.

In line with national policies and principles, as well as the strategic development pillars, supporting development, the leaders and communities of Ratlou, in conjunction with all government, community and business sectors, will, in future, join hands, work together and ensure that every effort is made to combat poverty, facilitate economic growth and employment, improve education and make education more accessible, ensure safety in all areas, provide quality food to all, secure and protect the food basket, provide affordable and quality health services, provide basic services and quality shelter, harness and integrate fragmented communities across the region, enhance innovation, research and learning, ensure political stability and fight corruption and ensure that people are happy and wealthy (see also SONA 2019 and NDP 2012).

In line with SPLUMA, 2013, Ratlou will in future focus, and has the potential, to successfully become a local municipal area /region that is:

1. fully sustainable (in all its definitions);
2. effective, pertaining to service delivery, infrastructure, alternative technologies and energy, smart and affordable movement systems, etc.;
3. recognised as an equality and just local municipal area / region that offers services and opportunities to all sectors and communities in a fair manner;
4. resilient and strong, specifically this local municipal area / region which is threatened by possible future disasters and environmental threats, as depicted by the Green Book; and
5. a local municipal area / region that is well- governed and managed by justice, fair practices and strong leadership teams and well-structured government entities that work in partnership with its communities and stakeholders – an embedded municipality.

In line with the provincial policies and strategic pillars, Ratlou and its people supports and align with the provincial vision which states that the province aspires to become “A sustainable urban and rural spatial development pattern focused on a modern, ecologically sustainable economy, supported by a suitably skilled labour force and providing for quality of living.”

The people of Ratlou will, in future, make every effort to support environmental integrity and sustainability, the optimum use of existing resources, the reduction of settlement sprawl and more compact formalised settlements, sustained economic growth, the mobilisation of private sector investment, the stimulation of economic growth, poverty reduction and the provision of basic services in areas with low economic potential, the economic development and transformation of rural areas, the focus of development on regional spatial development initiatives, development corridors, development zones and nodes and the protection of biodiversity, water and agricultural resources.

Vision directives relating to biophysical components

Based on the analysis of the biophysical components, the Ratlou municipal area is characterised by (refer to Figures on SWOT analysis):

1. Mining (Kalgold mine);
2. Commercial agriculture;
3. Small-scale agriculture (subsistence);
4. Topography;
5. Degraded land;
6. Vulnerable vegetation and land;
7. Water pollution (human activity);
8. Geology; and
9. Climate change.

The SWOT analysis indicated various strengths and opportunities, but also numerous weaknesses and opportunities related to each or some of the above.

In the future vision for Ratlou, every effort should be made by all role-players and communities to:

- 1 maintain and enhance strengths and opportunities;
- 2 to exploit opportunities and to mitigate and reduce weaknesses and threats; and
- 3 to transform weaknesses and threats into opportunities for the area. The impact of these are well presented in the diagram's in the previous sections of the report.

Vision directives relating to socio-economic components

Based on the analysis of the socio-economic components, the Ratlou municipal area is characterised by (refer to Figures on SWOT analysis):

1. Tourism;
2. Land reform;
3. Mining (Kalgold mine);
4. Poverty;
5. Energy (renewable energy projects);
6. Employment;
7. Cross-border (Botswana and South Africa);
8. LSMs.

The SWOT analysis indicated various strengths and opportunities, but also numerous weaknesses and opportunities related to each or some of the above.

In the future vision for Ratlou every should be made by all role players and communities to:

1. maintain and enhance strengths and opportunities;
2. to exploit opportunities and to mitigate and reduce weaknesses and threats; and
3. to transform weaknesses and threats into opportunities for the area. The impact of these are well presented in the diagrams in the previous sections of the report.

Vision directives relating to the built environment components

Based on the analysis of the socio-economic components, the Ratlou municipal area is characterised by (refer to Figures on SWOT analysis):

1. Road network;
2. Railway networks;
3. Main settlements;
4. Settlements (rural settlements);
5. Agricultural infrastructure (silos, mills and Agri-park);
6. Water;
7. Waste removal;
8. Energy; and
9. Educational facilities.

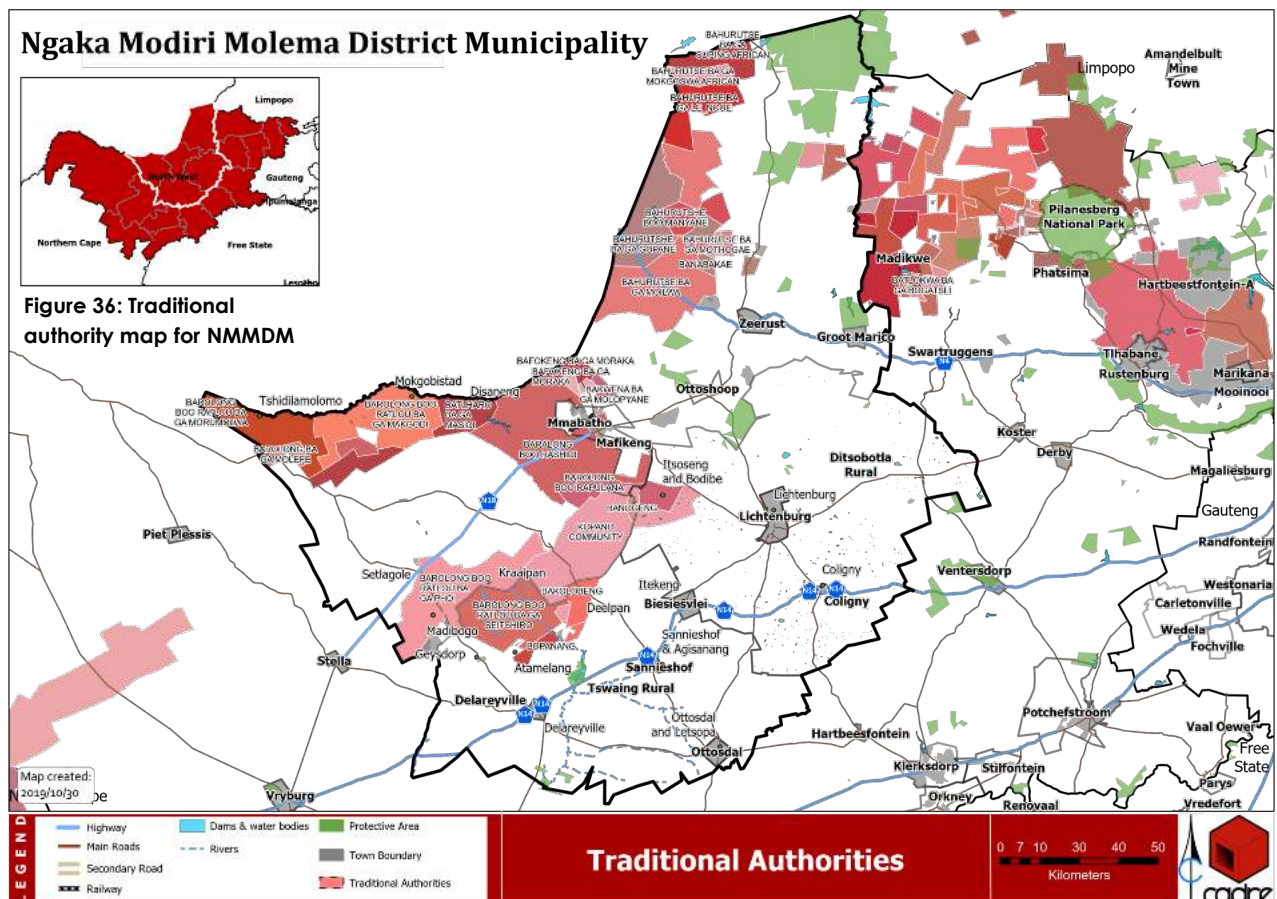
The SWOT analysis indicated various strengths and opportunities, but also numerous weaknesses and threats related to each, or some, of the above.

In the future vision for Ratlou, every effort should be made by all role-players and communities to:

1. maintain and enhance strengths and opportunities;
2. to exploit opportunities and to mitigate and reduce weaknesses and threats; and
3. to transform weaknesses and threats into opportunities for the area. well presented in the diagrams in the previous sections of the report.

5.1.4 Traditional authorities in the municipality

The following traditional authorities have jurisdiction in the municipal area and need to be considered (refer to **Figure 36: Traditional authority map for NMMDM**):



5.1.5 Municipal long-term vision

5.1.5.1 Long municipal vision

We, the people of Ratlou, have a dream -

We aspire to live, work and play in this beautiful, unique, rural and remote region that is off the beaten track.

We see a unique region with a rural and indigenous character, which is well supported by alternative future infrastructure, energy and communication technologies- "in the cloud, and in, beneath and above the ground". We strive to support the long-term sustainability, resilience and future economy of a predicted declining and threatened agricultural industry and population – a true traditional rural region in the fourth industrial revolution.

We see that our children and future generations will flourish in a safe, stable, healthy and quality environment, where no one will ever go hungry. Where every family will enjoy the benefits of decent shelter, quality spaces, education facilities at all levels, and affordable and accessible health care within well-structured and functional settlements and spaces.

We dream of a united community that is well integrated and connected within the region, as well as with the primary activity areas and towns outside the region, by means of improved roads, affordable public transport and sophisticated communication technologies. We understand that such improved integration and connections can improve access to new opportunities, jobs, education, recreation and medical facilities.

Our communities, with its unique and diverse cultures, dream of Ratlou becoming a unique home to current and future communities, as well as those who aspire and respect a rural and traditional lifestyle.

Our people envision a green region that is prioritised, managed, maintained and protected as a pristine agri-eco environment with an abundance of crops, cattle, biodiversity, wildlife and quality water systems and soils.

We see that our region, with its unique lifestyles and variety of new amenities and landmarks, will become a preferred destination for tourists and visitors, as well as new investors- specifically those in the agri, eco and tourist industries.

One day, our community will have pride in having ownership or co-ownership of our own land, communal areas, farmlands, and industries.

Our communities will take hands and cooperate with authorities and stakeholders to ensure that all the necessary and desired infrastructure, social services, recreation and education facilities will be provided and maintained to the satisfaction of our communities.

We dream that our sons and daughters and their children will enjoy and reap the benefits (and fruit) of a just and fair system where all government sectors will respect our needs and do everything possible to support and promote this vision and dream, which is strongly embraced and cherished by our community.

5.1.5.2 Short municipal vision

We, the people of Ratlou, have a dream – We aspire to learn, work and play in this beautiful, unique, rural and remote region that is off the beaten track. Alternative future infrastructure, energy and communication technologies will help us with agriculture in the fourth industrial revolution. We will have pride in having ownership or co-ownership of our own land, communal areas, farmlands, and industries.

5.2 Spatial concept

The spatial concept aims to provide a conceptual, high level and visually illustrative view of the intended view of the municipality in the future. The spatial concept is a visual illustration of the vision and spatial strategies. It aims to provide a general spatial guideline for where current and future developments and spaces might change or be created.

5.2.1 Informing the spatial concept

The spatial concept was informed by the following elements:

- National Spatial Development Framework (draft) **Figure 37: NSDF - National Spatial Action Area (District)**. This pattern places Ratlou LM within a National Transformation Corridor. This implies that the municipality is placed to receive sustainable and transformative national development, some level of increased urbanisation, urban consolidation, improved rural and urban connections and greater ecological management. Lichtenburg, Vryburg and Mahikeng (Regional Development Anchors) are seen as essential to this success and realisation (DALRRD & DPME, 2019).

Based on the analysis and desired long-term spatial form for South Africa, the NSDF has identified a number of targeted intervention areas (refer to **Figure 7: National Spatial Action Areas**). As mentioned, Ratlou lies within one of the three National Transformation Corridors – North Western Transformation Corridor. This corridor type is characterised by:

- Large, youthful populations;
- Shared histories of deep deprivation and neglect as former apartheid Bantustans;
- High levels of poverty and unemployment; and
- Dense sprawling rural settlement forms.

North-western Transformation Corridor, as shown in **Figure 8: North-western Transformation Corridor**, displays the importance of the Madibogo and Setlagole to the greater corridor area. Additionally, it shows the connections and linkages, both in terms of movement and regions types as described in the sub-frame's discussion prior (DALRRD & DPME, 2019).

- Provincial Spatial Development Framework (refer to **Figure 38: North West Provincial Spatial Development Framework**). This map illustrates the final North West Provincial SDF. This highlights the importance nodes, routes and spaces within the municipality and how they function with the wider province.
- Ngaka Modiri Molema District SDF (draft) **Figure 39: District Conceptual Spatial Framework (modified)** This map aims to illustrate the Districts SDF conceptual approach. This is important to understand as it illustrates how municipality is integrated and functions as part of the district in a number of areas such as commercial and subsistence agriculture, protected and conservation areas, movement and settlement areas.
- Status quo analysis.
- Municipal long-term vision.
- Consultations (ISC).

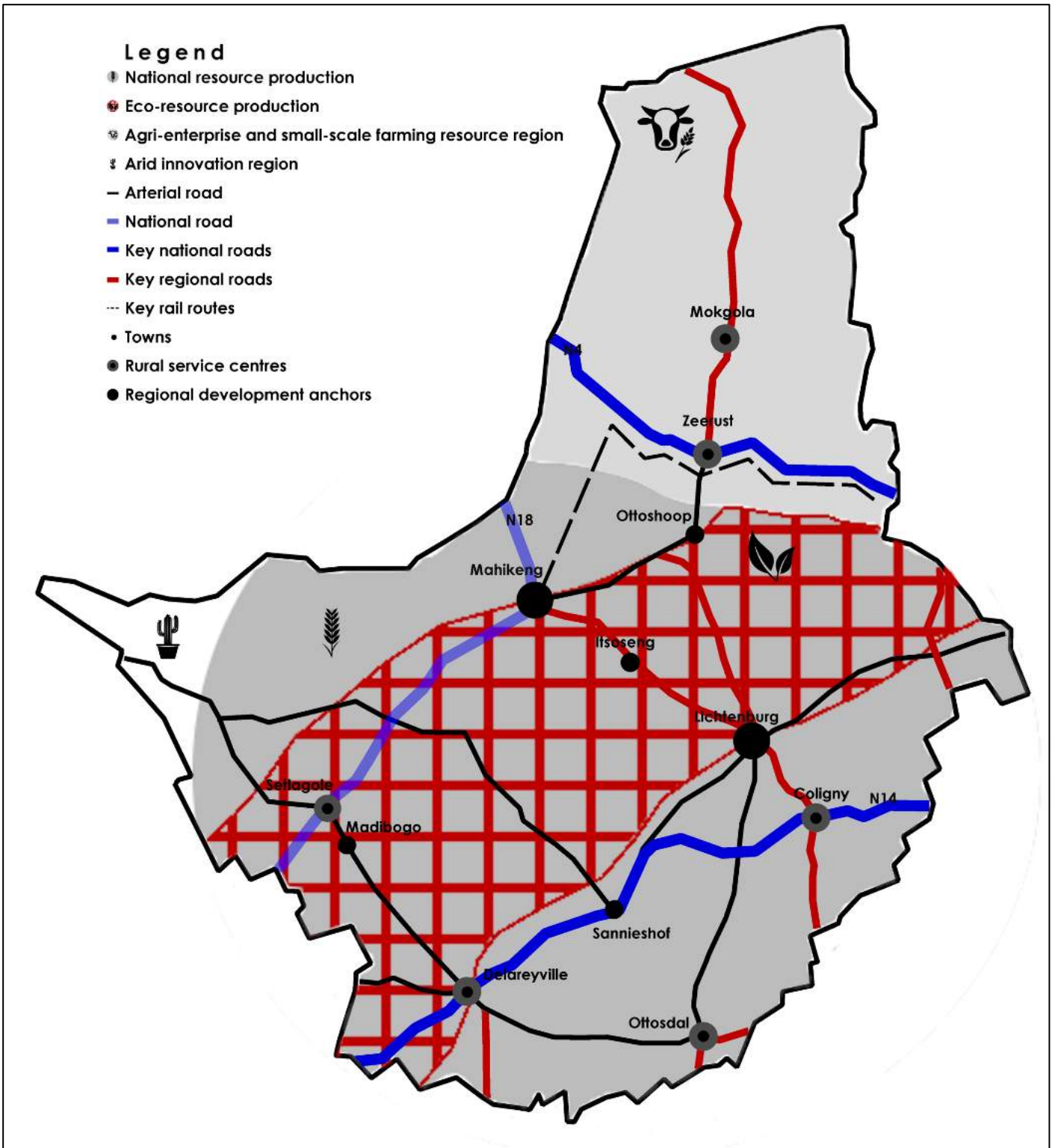


Figure 37: NSDF - National Spatial Action Area (District) (DALRRD & DPME, 2019)

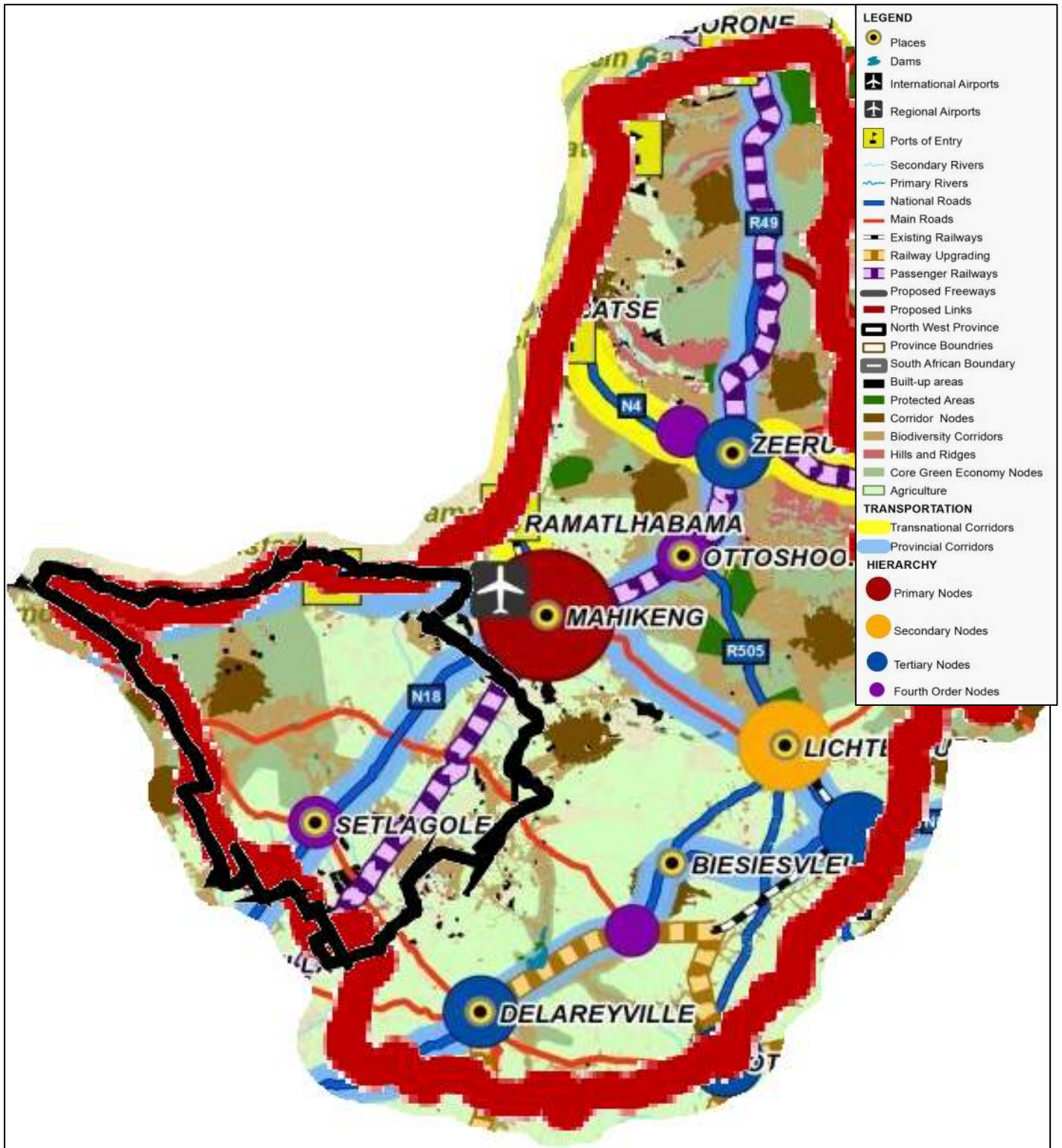


Figure 38: North West Provincial Spatial Development Framework

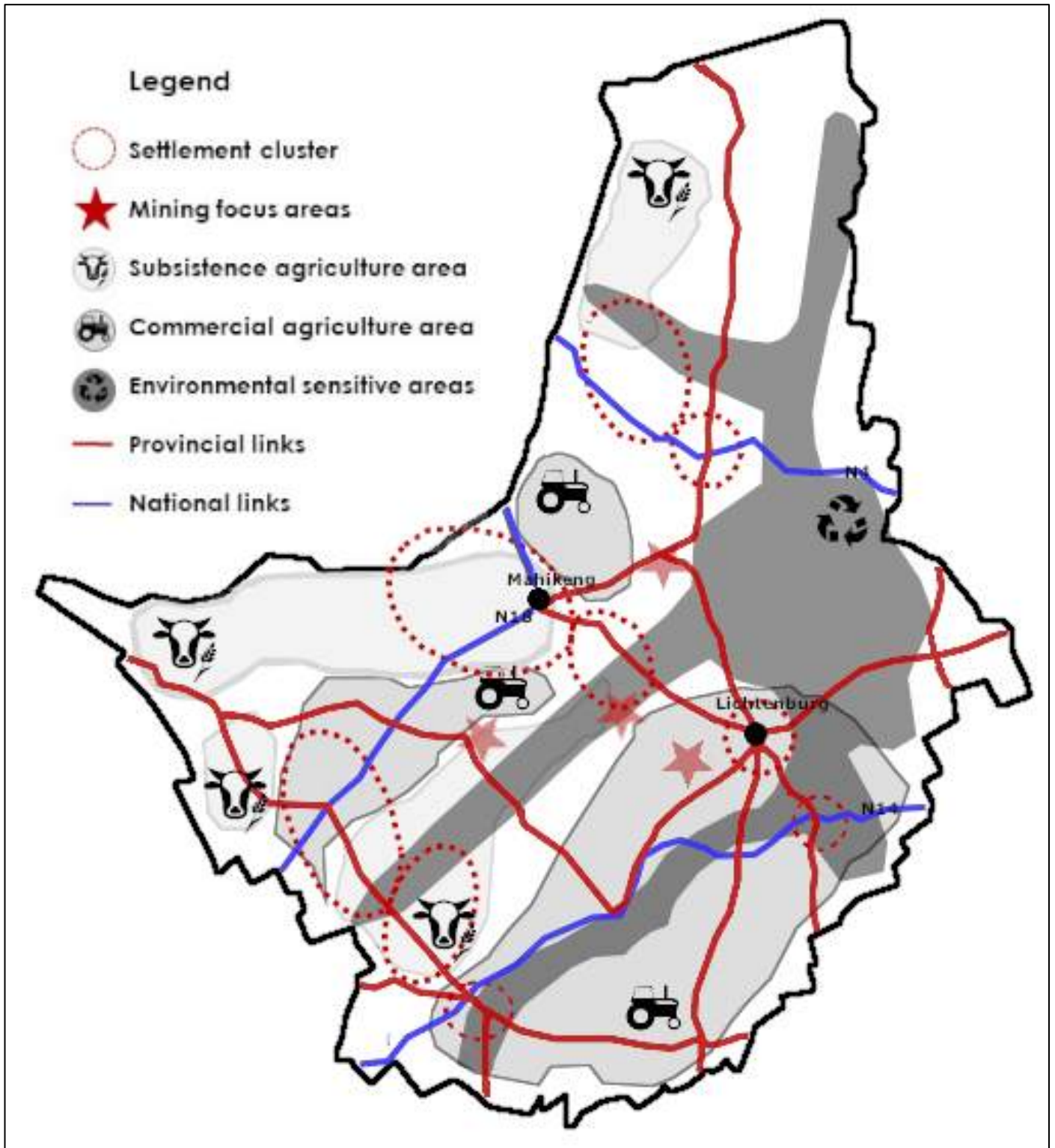


Figure 39: District Conceptual Spatial Framework (modified) (NMMDM, 2019)

5.2.2 Ratlou spatial concept framework

The Ratlou spatial concept framework (refer to **Figure 40: Ratlou spatial concept framework**) is a visual representation of the long-term municipal vision. It aims to provide a schematic and diagrammatic view of the desired long-term spatial structure of the municipality. This, as mentioned prior, will form the basis for the detailed SDF for the entirety of the municipality (including development plans).

The process of developing the spatial concept incorporated several structuring elements, which have been integrated to form an ideal concept, comprising of the following structuring elements: (1) Nodes and centres (settlements and villages), (2) movement and connectivity (roads and rail), and (3) spatial areas (agriculture, conservation etc.) and various unique components.

The first structuring element of nodes and centres can be understood to be important towns, settlements or landmarks. They function as nodal points within the municipality and generally include large populations, important activities and industries, crucial to the functioning of the municipal area. Within Ratlou there is primarily two first order settlements of Setlagole and Madibogo which are aimed to be formalised. Additionally, the municipality features two second order nodes such as Kraaipan (old and new) and Mareetsane. Disaneng, Mokgobistad, and Tshidilamolomo are designated as third order nodes. The fourth and most numerous levels of settlement within the municipality are the remote villages which are classified as fourth order nodes. These are spread throughout the north and south with little in the centre of the municipality. The remainder of the settlements still receive attention; however, they are aimed at being maintained and improved in basic services. The final two categories of this element are that of mining (Kalgold) and tourism (Kraaipan, Disaneng and South Africa – Botswana border (border corridor)). Tourism in Ratlou is varied with several types of established (Kraaipan museum and Disaneng dam) and potential tourism opportunities such as the Molopo River (South Africa – Botswana border).

The second structuring element of movement and connectivity can be understood to be the network that connects the first element. This functions as the nervous system of the municipal area. Within Ratlou there exists a hierarchy in the network and as is seen in concept, a proposed expansion of this network. The highest level of this hierarchy is that of the national mobility route of the N18 (Mahikeng to Vryburg) – Transfrontier Corridor. This forms the central connection between the municipal area and greater region surrounding it. The second level, regional mobility route (Setlagole civic corridor), in this hierarchy connects to the first but runs in a perpendicular fashion from Setlagole, through Madibogo and into Tswaing Local Municipality.

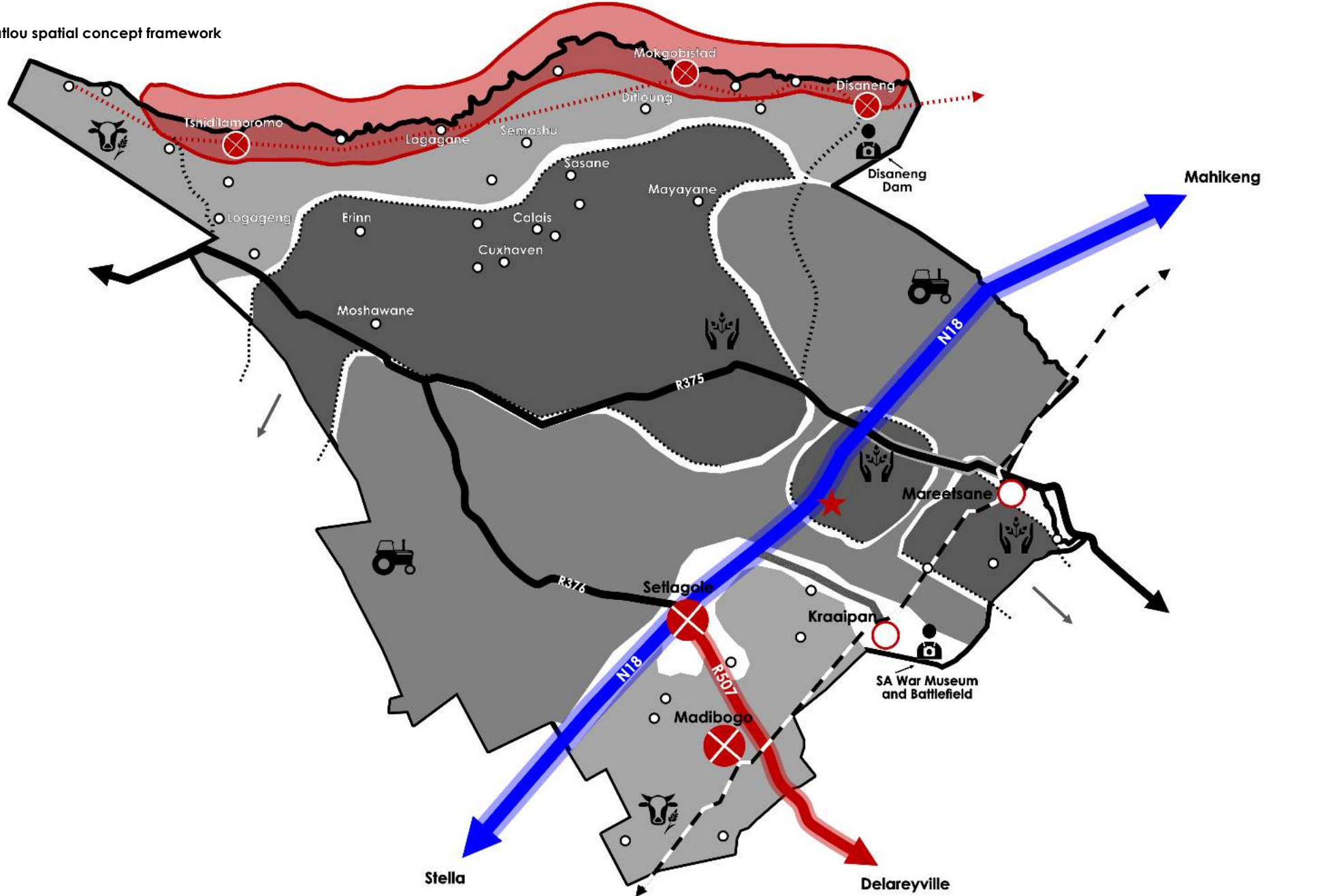
The third level of this hierarchy is that of main routes. This forms finer grain network that connects the lower level nodes, centres and rural areas of the municipality together. The additional component of this element is the priority linkage routes which are existing routes that should be upgraded and improved. This lies largely within the northern area and is done to better connect and integrate (connects to existing routes) this space with the southern region. The primary priority route, as the name suggests, is the focus component of this route with priority linkage routes stemming from this and connecting to the existing network in the south. The Mareetsane corridor, Kraaipan culture corridor, and border corridor all form part of these two route types.

Finally, not part of the hierarchy, is that of the rail network. This network is important to the functioning to certain areas and specific industries that lie upon it (certain rail facilities are not active and need to be revitalised and improved).

The final and third structuring element of spatial areas can be understood to be the designation of areas of land into various types, generally based on current or proposed uses. In breaking with the previous structuring elements, this not based on hierarchy. Rather the importance is determined through illustration such as one layer or type above another. The first spatial area of biodiversity corridors and other conservation areas. The logic behind the demarcation of these corridors and spaces is in line with the Districts SDF spatial concept framework which follows sensitive aquatic and terrestrial eco-systems and continues outside the municipal area.

The final spatial area of agriculture is split into two distinctive categories, namely; commercial which occupies much of central regions and subsistence, which occupies the northern and southern areas (around settlements). It is important to mention that although these spaces are divided by the biodiversity corridors they function largely as one whole and is shown by the "bridge" type connections across the corridors.

Figure 40: Ratlou spatial concept framework



Legend

- | | | | |
|--|---|--|---|
| <p>Movement:</p> <ul style="list-style-type: none"> National mobility road Regional mobility road Primary priority linkage road Priority linkage road Main road Rail road | <p>Points / Nodes:</p> <ul style="list-style-type: none"> ⊗ First order nodes ○ Second order nodes ⊗ Third order nodes ○ Fourth order nodes ★ Mining node 👤 Tourism node | <p>Corridors / Spaces:</p> <ul style="list-style-type: none"> Subsistence agriculture Commercial agriculture Conservation, protected and biodiversity areas Border corridor | <ul style="list-style-type: none"> N18 Transfrontier corridor Setlagole civic corridor Kraaipan cultural corridor Mareetsane corridor |
|--|---|--|---|

5.2.3 Setlagole and Madibogo spatial concept framework

The first main settlement in the municipal area is Setlagole and Madibogo (refer to **Figure 41: Setlagole and Madibogo spatial concept framework**). In the developing the spatial concept for this area, the approach was taken which involved a local level focus yet with some higher-level perspectives given the spread-out nature of the settlements. The same three general structuring approaches were taken in this main settlement as were taken in the municipal spatial concept: (1) Nodes and centres (settlements and villages), (2) movement and connectivity (roads and rail), and (3) spatial areas (agriculture, conservation etc.) and various unique components.

The structuring element of nodes and centres indicates in this main settlement the two settlements of Setlagole and Madibogo are first order nodes (in process) with Kraaipan allocated as a second order node. These are settlements in which additional resources are allocated (housing – expansion zones, infrastructure etc.) and are of importance to functioning of the wider settlement and municipality. The remainder of the remote villages within the area are fourth order nodes (consolidation) such as Madibogo Pan. This categorisation implies that they should be maintained with basic infrastructure and public services but should be limited from expanding unsustainably and erratically. A common principle that has been applied to all the settlements is the use of a settlement edge, the concept of this is aimed at limiting the development of settlement into other land uses such as conservation, subsistence agriculture, open space etc. This settlement edge has been delineated around each of the settlements within the area. Within the boundary area of expansion, infill, in-situ upgrading etc are defined. These areas are largely based on proposed and currently underway township establishments. The nodal points within the main settlement are existing and future activity areas such as in Setlagole (Setlagole commercial and civic nodes) and Madibogo (Madibogo gateway node). These areas also form the basis for the activity routes that are related to the second structuring element. The additional nodal type is the Kraaipan cultural node. This is primarily related to the South African War museum and battlefield.

The second structuring element of movement and connectivity is an essential focus area for this space. The main settlement generally has a clear, well defined and planned movement and connectivity network on a high level, and this is utilised in the spatial concept. However, at a lower level this is generally lacking and this spatial concept attempts to present a way of developing one.

The N18 (national mobility route – Transfrontier corridor) serves as an important connection between Mahikeng, Setlagole and Vryburg and is utilised as the primary access route to and from the settlement and wider region. The regional mobility route – Setlagole civic corridor – R507 connects the settlements of Setlagole and Madibogo to Tswaing Local Municipality and is an important focus route in the municipal area. The main route of the R376 within this area serves to connect the settlements to the north. Building off from these routes are the minor routes which split off from the prior routes to connect settlements and activities between the main routes. The additional two categories consist of the minor and feeder routes which connect parts of settlements and isolated areas to the main routes. These are generally distributed within settlements with the intention of large portions of the area able to have an accessible route onto a larger route with little distance to travel (foot and vehicle). The final category, of priority linkage routes, are aimed to develop a new route/network to better integrate spaces. This route is placed primarily in Kraaipan to connect to the N18 (2951 road) and to Tswaing to better integrate the villages and remote villages. This will function as the new Kraaipan cultural corridor (redirected from the previous SDF) but will still move through the important cultural centres within Kraaipan.

The final and third structuring element of spatial areas is influenced by the wider municipal area spatial areas as seen in the spatial concept framework previously. The first significant spatial area type is the conservation, protected and biodiversity area. This aligns with the wider municipal biodiversity network but its detailed to specific areas that connect to the network. It additionally aims to prevent unsustainable and damaging subsistence agricultural practices common in this area. However, in saying this the social and economic benefit of subsistence agriculture cannot be negated and thus focus is given to areas that are not sensitive for this practice. The subsistence agricultural focus areas are near the settlements and are essential for the

community's livelihood. Thus, support for these areas, such as through the FPSU's, are a must. Commercial agriculture makes up the final type of spatial area. This are type carries over from the surrounding areas, as is seen in municipal spatial concept, and nearly exclusively located to the west of the N18.

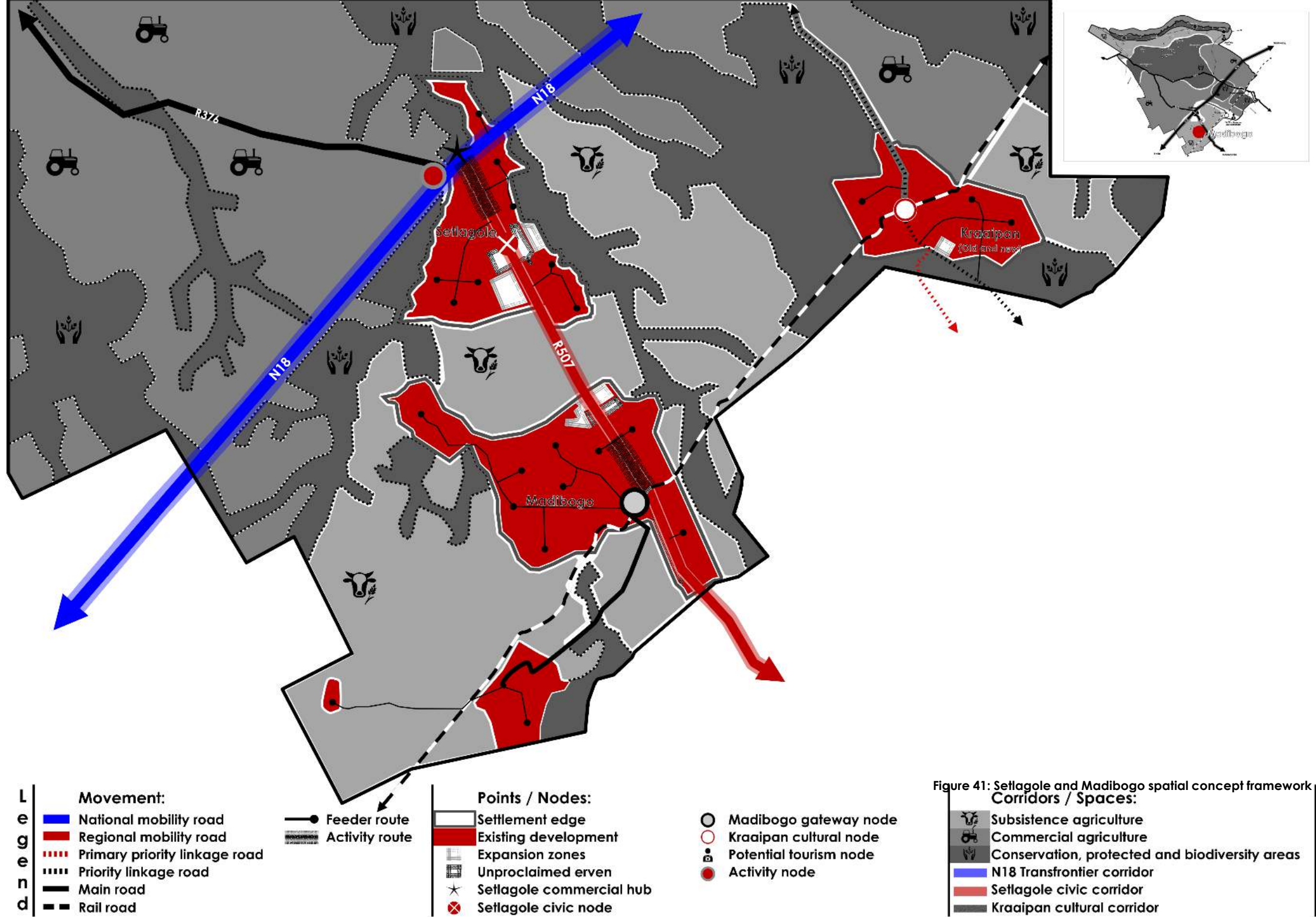


Figure 41: Setlagole and Madibogo spatial concept framework

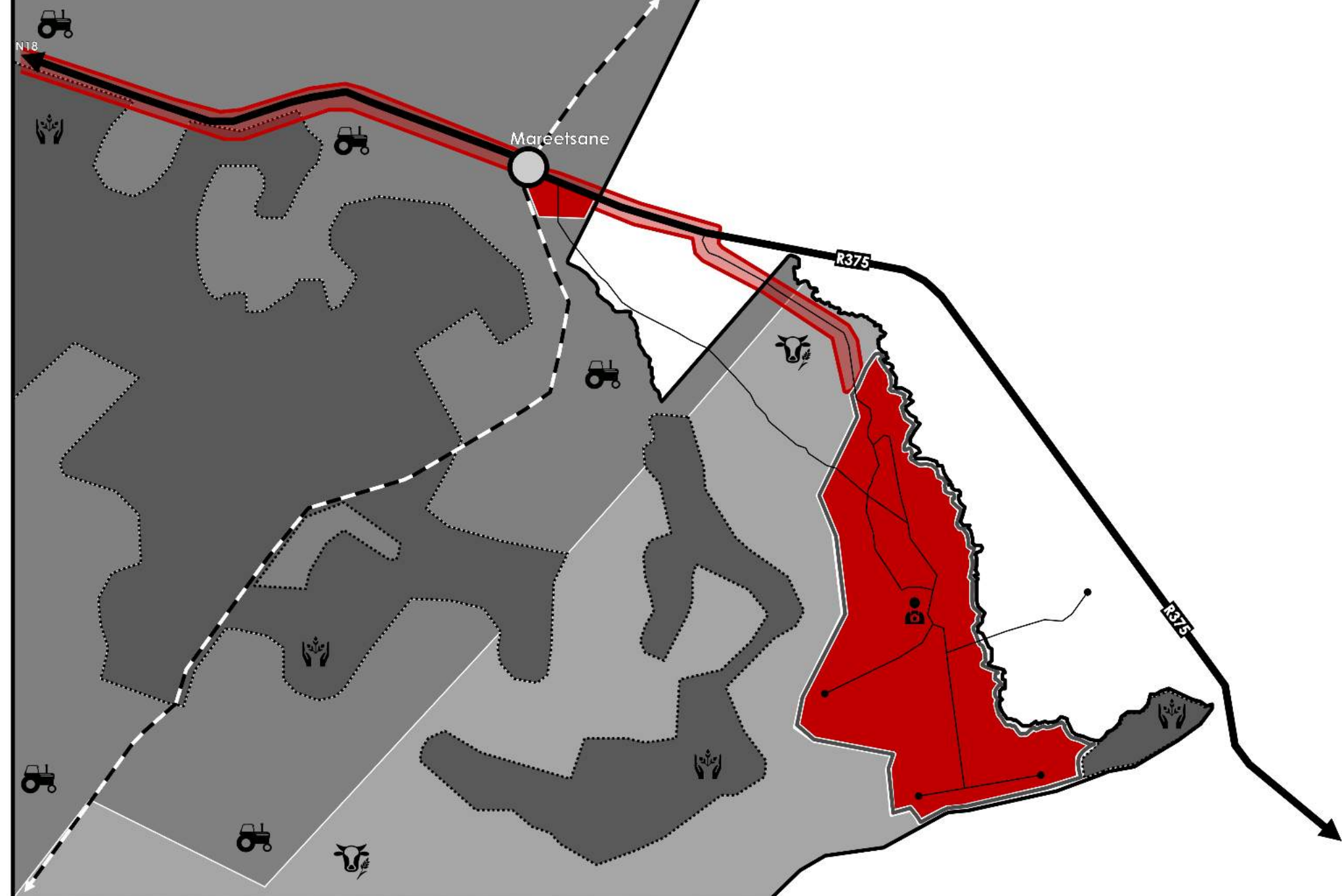
5.2.4 Mareetsane and Batho-Batho area spatial concept framework

The second main settlement in the far east of the municipal area and on the border with Tswaing municipality is the Mareetsane and Batho-Batho areas (refer to **Figure 42: Mareetsane and Batho-Batho spatial concept framework**). The three general structuring approaches, as used prior, were taken in this area as were taken in the municipal spatial concept and other settlements: (1) Nodes and centres (settlements and villages), (2) movement and connectivity (roads and rail), and (3) spatial areas (agriculture, conservation etc.) and various unique components.

The first structuring element of nodes and centres in this area identifies Mareetsane and Batho-Batho as a second order node. This settlement is where additional resources are allocated, and formalisation is intended (infrastructure etc.) Mareetsane also features the Mareetsane gateway node on the railway line and R375 where agricultural services such as silos are present. The remainder of the settlement in the area is made up of the close by Batho-Batho to the south-east. Batho-Batho should be maintained with basic infrastructure and public services but should be limited from expanding unsustainably and erratically. The use of a settlement edge is aimed at limiting the development of settlement into other land uses such as conservation, agriculture, open space etc. This settlement edge has been delineated around Batho-Batho. The boundaries are strict in nature so to improve settlement compaction and support formalisation. The tourism node within the settlement are areas where tourism exists already in the form of wider areas game farms.

The second structuring element of movement and connectivity is an essential future focus area for this area. The area has a largely single movement and connectivity route (R375) that connects to the west (N18) and to the east (Tswaing). The area also features the main railway route in the municipality with the important stop in Mareetsane. Another important route to consider is the main roads that connect Mareetsane to Batho-Batho. These routes require extensive upgrading and maintenance to improve the settlements integration into the wider municipality and region. Building off from these routes are the feeder routes which split off from the main routes to connect small areas within Batho-Batho. These are generally distributed within settlements with the intention of large portions of the area able to have an accessible route onto a larger route with little distance to travel (foot and vehicle).

The final and third structuring element of spatial areas highlights several spatial types within this area. The first significant spatial area type is the conservation, protected and biodiversity area. This aligns with the wider municipal biodiversity network and spaces but its detailed to specific areas that connect to the network. This system runs closely through the subsistence and commercial agriculture areas to allow for these important spaces to function as they are currently but also to guide them in a manner that does not damage the wider environment. Due to the social and economic benefit of subsistence agriculture cannot be negated and thus focus is given to areas that are not sensitive for this practice. The subsistence agricultural focus areas are near the settlements (immediate surrounds) of Batho-Batho and are essential for the community's livelihood. The final and related spatial type is commercial agriculture. This spatial area runs largely to the west of Batho-Batho and outwards. Commercial agriculture is aimed to be largely preserved with cognisance taken from environmental spaces in between as shown in the concept. The final component is the Mareetsane corridor, it is linked to the gateway and tourism nodes identified prior. This is related to the game farms present in the wider area and additionally aiming to better integrate Mareetsane and Batho-Batho into the wider municipality and important settlements such as Setlagole.



0 1 2 3 4 5 6 7 8 9 10

Movement:

- Rail route
- Main road
- Feeder route

Points / Nodes:

- Settlement edge
- Existing development
- Tourism node
- Mareetsane gateway node

Corridors / Spaces:

- Subsistence agriculture
- Commercial agriculture
- Conservation, protected and biodiversity areas
- Mareetsane corridor

Figure 42: Mareetsane and Batho-Batho spatial concept framework

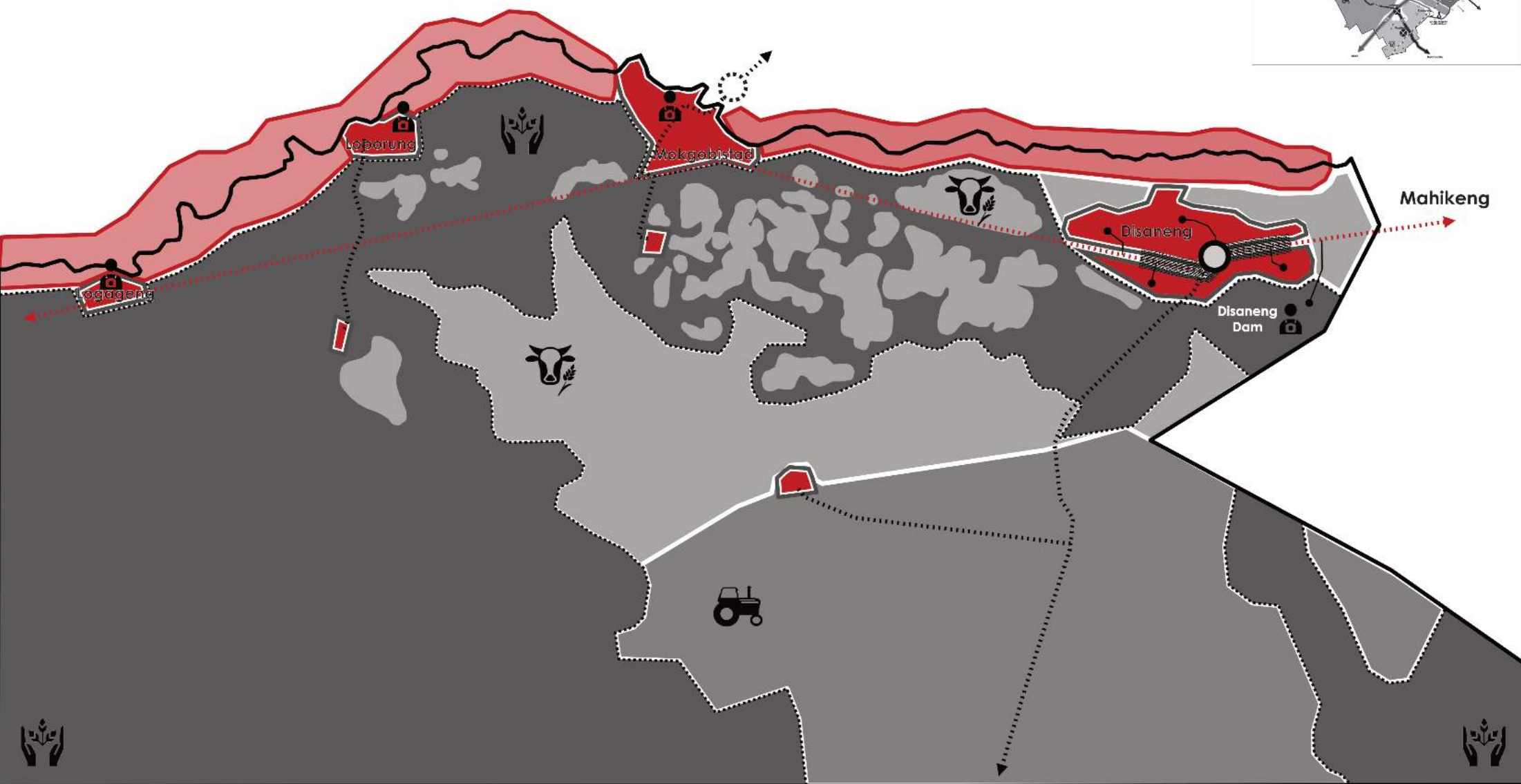
5.2.5 Disaneng and Mokgobistad spatial concept framework

The third settlement area in the east of the municipal area and close to Mahikeng is the Disaneng and Mokgobistad settlement area (refer to **Figure 43: Disaneng and Mokgobistad spatial concept framework**). The three general structuring approaches, as used prior, were taken in this settlement as were taken in the municipal spatial concept: (1) Nodes and centres (settlements and villages), (2) movement and connectivity (roads and rail), and (3) spatial areas (agriculture, conservation etc.) and various unique components.

The first structuring element of nodes and centres in this area identifies Disaneng and Mokgobistad as third order nodes. These settlements are where additional resources are allocated, and formalisation is intended (infrastructure etc.) Disaneng also features a gateway node and activity streets where increased commercial activity is encouraged. Mokgobistad has a designated border node due to its Port of Entry (PoE – border post). The remainder of the settlements in the area are remote villages which are allocated as fourth order nodes. These villages should be maintained with basic infrastructure and public services but should be limited from expanding unsustainably and erratically. An additional point of significance is the Disaneng agri-village, the exact location is unknown, however, it is an important planned development in the area to take cognisance off. A common principle that has been applied to all the settlements is the use of a settlement edge, the concept of this is aimed at limiting the development of settlement into other land uses such as conservation, subsistence agriculture, open space etc. This settlement edge has been delineated around each of the settlements within the area. The boundaries are strict in nature so to improve settlement compaction. The nodal points (tourism nodes) within the larger region are areas where tourism exists already and potential and form part of the wider, municipal level border corridor space (South Africa – Botswana border). This space is allocated as a border corridor focused around tourism due to the Molopo River that flows through the area. This is an intermittent river and thus will only truly function as a corridor during certain times of the year (rainy season).

The second structuring element of movement and connectivity is an essential future focus area for this main settlement area. The main settlement area has a largely single movement and connectivity route (D414) that connects to the west of the municipality and to Mahikeng. This serves as the access route to the border corridor which stretches across the north of the municipality. However, at a wider network level, the lower level the network is generally lacking, and this spatial concept intends to highlight where possible routes could go to improve it. The D414 (primary priority linkage route) serves as the main route along the border with Botswana. This route is prioritised for improvement and maintenance due to its connecting function across the north and out of the municipality. Another important route to consider, as shown on the municipal level concept plan, is the N18 (Transfrontier corridor). This route forms a strong foundation to this area to, as such the priority linkage route is shown leading to the south and connecting to this route. This aims to better integrate the settlements with southern parts of the municipal area. Building off from these routes are the feeder routes which split off from the priority routes to connect settlements and activities. These are generally distributed within settlements with the intention of large portions of the area able to have an accessible route onto a larger route with little distance to travel (foot and vehicle).

The final and third structuring element of spatial areas highlights several spatial types within this settlement. The first significant spatial area type is the conservation, protected and biodiversity area. This aligns with the wider municipal biodiversity network and spaces but its detailed to specific areas that connect to the network. This system runs closely through the subsistence agriculture areas to allow for these important spaces to function as they are currently but also to guide them in a manner that does not damage the wider environment. Due to the social and economic benefit of subsistence agriculture cannot be negated and thus focus is given to areas that are not sensitive for this practice. The subsistence agricultural focus areas are near the settlements (immediate surrounds) are essential for the community's livelihood. The allocation of a large area for subsistence agriculture highlights a focus of this framework to show that the spaces need to be better integrated with one another. The final and related spatial type is commercial agriculture. This spatial area runs largely to the south of the settlement and outwards. Commercial agriculture is aimed to be largely preserved with cognisance taken from environmental spaces in between as shown in the concept.



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- Movement:**
- Primary priority linkage road
 - Priority linkage road
 - Feeder route
 - ▨ Activity route

- Points / Nodes:**
- ▭ Settlement edge
 - Existing development
 - Tourism node
 - Potential tourism node
 - Border node
 - Disaneng gateway node

- Corridors / Spaces:**
- ▨ Subsistence agriculture
 - ▨ Commercial agriculture
 - ▨ Conservation, protected and biodiversity areas
 - Border corridor

5.2.6 Logageng and Tshidilamolomo spatial concept framework

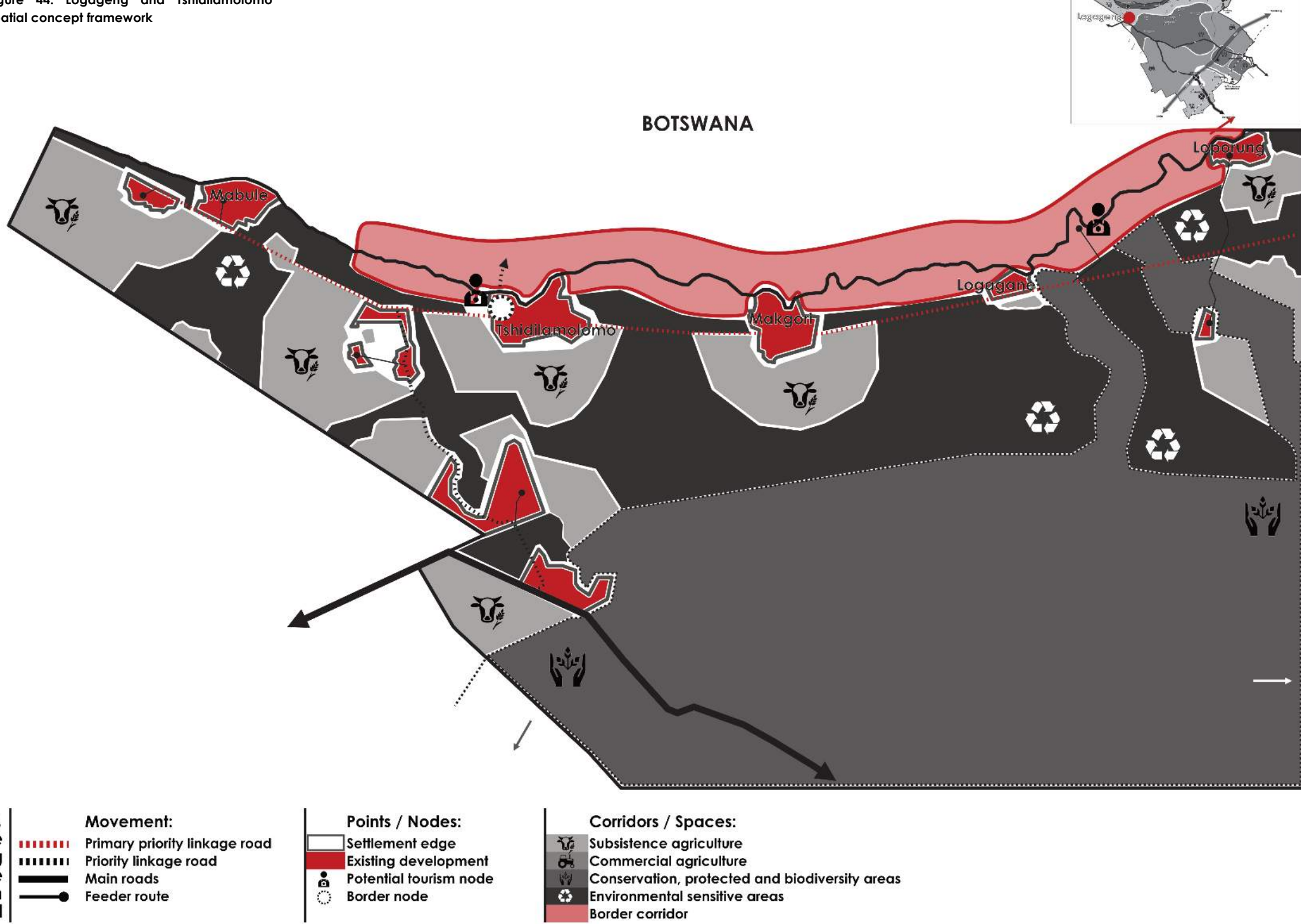
The final area in the municipal area is north-western area of Logageng and Tshidilamolomo (refer to **Figure 44: Logageng and Tshidilamolomo spatial concept framework**). The three general structuring approaches were taken in this area as were taken in the prior three spatial concepts: (1) Nodes and centres (settlements and villages), (2) movement and connectivity (roads and rail), and (3) spatial areas (agriculture, conservation etc.) and various unique components.

The first structuring element of nodes and centres in this settlement area identifies the settlement of Tshidilamolomo as a third order node. This settlement is where additional resources are allocated (infrastructure etc.) and is important to functioning of the wider settlement and border area. The remainder of the settlements in the area are fourth order nodes (remote villages). These villages should be maintained with basic infrastructure and public services but should be limited from expanding unsustainably and erratically. A common principle that has been applied to all the settlements is the use of a settlement edge, the concept of this is aimed at limiting the development of settlement into other land uses such as conservation, subsistence agriculture, open space etc. This settlement edge has been delineated around each of the settlements within the area. The boundaries are strict in nature so to improve settlement compaction. The nodal points (border and tourism nodes) within the settlements are areas with tourism potential and form part of the wider, municipal level border corridor space. The border node is Tshidilamolomo has proposals for commercial and retail development. This space is allocated as the border corridor with tourism potential due to the Molopo River that flows through the area. This is an intermittent river and thus will only truly function as a corridor during certain times of the year (rainy season). The final nodal type is that of the border node (PoE) in Tshidilamolomo which should feature activities related to its service and goods that move through it as well as a commercial/shopping centre.

The second structuring element of movement and connectivity is an essential future focus area. The area has a largely single movement and connectivity route (D414). However, at a wider network level, the lower level the network is generally lacking and this spatial concept attempts to present a way of developing one. As mentioned, the D414 (primary priority linkage route) serves as the main route along the border with Botswana. This route is prioritised for improvement and maintenance due to its connecting function across the north of the municipality. The other important route is the R375/376 (main route) that crosses over into Kagisano-Molopo Local Municipality and connects to D414. Building off from these routes are the feeder routes which split off from the prior routes to connect settlements and activities between the priority linkage, primary priority linkage and main routes. These are generally distributed within settlements with the intention of large portions of the area able to have an accessible route onto a larger route with little distance to travel (foot and vehicle).

The final and third structuring element of spatial areas is influenced by the wider municipal area spatial areas as seen in the spatial concept framework previously. The first significant spatial area type is the conservation, protected and biodiversity area. This aligns with the wider municipal biodiversity network and spaces but its detailed to specific areas that connect to the network. Related to this spatial type is environmentally sensitive areas that should be avoided for any high impact development and function as an ancillary to the conservation, protected and biodiversity areas. These spatial types aim to prevent unsustainable and damaging subsistence agricultural practices in the area. However, in saying this the social and economic benefit of subsistence agriculture cannot be negated and thus focus is given to areas that are not sensitive for this practice. The subsistence agricultural focus areas are near the settlements (immediate surrounds) and are essential for the community's livelihood. Thus, support for these areas, such as through the FPSU's in the municipality, are a must.

Figure 44. Logagene and Tshidilamolomo spatial concept framework



5.3 Spatial strategies

The spatial strategies developed for the SDF are informed by the community (public participation), Ngaka Modiri Molema District SDF and the status quo analysis conducted in 2019.

To ensure further alignment, the spatial strategies of the district and local municipality, are informed by the five strategic objectives of the Province (refer to **Figure 13: Five strategic objective areas as identified by the PSDF**).

5.3.1 Settlement structure and hierarchy

Strategy 1	Settlement structure and hierarchy	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offers a wide range of opportunity and can accommodate growth and change. Other settlements are small, lack sufficient access and service infrastructure, with limited economic opportunities for its residents. Generally, the potential of settlements to contribute to change and improved growth, directly relates to their relationship with natural assets, cultural assets and infrastructure availability. Growth should be encouraged in areas where impacts on existing assets / resources will be the least or where it lends itself to generating new opportunities.	All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offers a wide range of opportunity and can accommodate growth and change. Other settlements are small, lack enough access and service infrastructure, with limited economic opportunities for its residents. Generally, the potential of settlements to contribute to change and improved growth, directly relates to their relationship with natural assets, cultural assets and infrastructure availability. Growth should be encouraged in areas where impacts on existing assets / resources will be the least or where it lends itself to generating new opportunities.
Introduction	As indicated in the SDF map the functional interaction between settlements within the broader municipal urban system, and their location in the municipal spatial structure, the municipal settlement structure can be classified into four categories: <ul style="list-style-type: none"> ▪ Primary nodes: Mahikeng ▪ Secondary nodes: Lichtenburg ▪ Tertiary nodes: Zeerust, Delareyville, Ottosdal, Coligny ▪ Fourth order nodes: Lehurutse, Groot Marico, Ottoshoop, Setlopo, Setlagole, Sannieshof 	The functional relationship between the various levels and types of settlements within Ratlou can be classified into the following categories: <ul style="list-style-type: none"> ▪ First order: Setlagole and Madibogo ▪ Second order: Kraaipan and Mareetsane. ▪ Third order: Disaneng, Mokgobistad, and Tshidilamolomo. ▪ Fourth order: Diolwane, Logagane, Loporung, Logageng etc. <p>Hierarchy delineation rationale:</p> <ul style="list-style-type: none"> ▪ First order: <ul style="list-style-type: none"> ▫ Large population and concentration of people. ▫ Important to the functioning of the municipality. ▫ Focus area for investment and is already a place of high investment. ▪ Second order: <ul style="list-style-type: none"> ▫ Medium populations and concentrations of people. ▫ Important on a regional level within the municipality. ▫ Some levels of infrastructure. ▪ Third order:

			<ul style="list-style-type: none"> ▫ Small populations. ▫ Serves as a hub for local areas surrounding the node – basic services and provisions. ▫ Some infrastructure – bulk services. ▪ Fourth order: <ul style="list-style-type: none"> ▫ Very small populations with some density – village settlement typology. ▫ Very small local influence and impact. ▫ Limited to no infrastructure – basic services are largely portable.
Protect	Further greenfield settlement expansion outside the boundaries of the identified settlement, and the boundaries of the lower order individual settlements should be discouraged where possible.	1	Limiting the uncontrolled greenfield expansion in the Setlagole and Madibogo settlement.
		2	Encourage infill developments inside of Setlagole and Madibogo.
		3	Limit the expansion of Kraaipan (old and new).
		4	Designate "settlement edges" around all settlements. Utilise the edges to guide development towards consolidation and densified development.
		5	Discourage the establishment of multiple, small, isolated and dispersed settlements as is the case in the northern area of Ratlou.
Change	Focus on the consolidation of existing settlements through targeted infilling and/or densification of existing settlements where appropriate to local circumstances.	1	Emphasise the use of infill development and in situ upgrading within settlements to avoid the isolated, formalised areas currently common throughout the municipality.
		2	Utilise densification in Setlagole and Madibogo in strategic areas such as along the N18 and R507.
		3	Densification around the border posts in Mokgobistad and Tshidilamolomo (border nodes).
New	Any new settlement development should be prioritised within the boundaries of the existing primary and secondary settlements.	1	Only when necessary should any new, large scale residential areas be established.
		2	Any new area should be well thought out and integrated into the settlement fabric. The connecting area between Setlagole and Madibogo would be the most appropriate area for such a development (Setlagole civic corridor).
		3	Disaneng would also be suitable for any new development. Along the main road from Mahikeng would be an appropriate location for such a development.
		4	Development of a commercial hub in Mokgobistad next to existing services such as the petrol station (Sasol).

5.3.2 Protected areas

Strategy 2	Protected areas	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	Humanity depends on nature for physical and spiritual sustenance, livelihoods, and survival. It is imperative that provincial and private protected areas be shielded from negative development proposals/impacts.	Humanity depends on nature for physical and spiritual sustenance, livelihoods, and survival. It is imperative that provincial and private protected areas be shielded from negative development proposals/impacts. It is further important that areas are connected and made accessible to the wider public.
Introduction	<p>NMM is gifted with natural resources and therefore environmental conservation and protection is imperative. The NMM comprises of both provincial and private nature reserves which showcase some of the provinces wildlife thus contributing to the tourism sector.</p> <ul style="list-style-type: none"> ▪ Mafikeng Provincial Game Reserve offering a recreational area and breeding centre for a variety of game species ▪ Lichtenburg Game Breeding Centre (Provincial) which is a breeding centre for endangered species ▪ Pienaar Private Nature Reserve ▪ Marico Bosveld Private Nature Reserve ▪ Madikwe Provincial Game Reserve, the fifth largest game reserve and one of the best conservation areas in Africa offering the Big 5. ▪ Botsalano Provincial Game Reserve in Ramatlabama near the South Africa and Botswana Border ▪ Baberspan Provincial Bird Sanctuary one of the largest waterfowl sanctuaries in South Africa which is declared as a wetland of international significance ▪ Molemene Provincial Nature Reserve comprising of high value game species, 	Ratlou does not feature any large or significant protected area. The municipality only features some small and disjointed protected areas.
Protect	Protected areas should enjoy the highest level of protection from any form of development not compatible with the status of protected areas.	<p>1 The current, albeit, small protected areas should be protected from any detrimental developments.</p> <p>2 Discourage large scale, high impact developments within a certain radius or range from the protected areas.</p>
Change	Consider potential extension of existing protected areas or establishment of new areas (such as Marico Biosphere reserve) in accordance with identified potential biodiversity corridors and in line with provincial spatial planning and conservation goals and priorities.	-

New	Consider establishment of additional formally protected areas in accordance with identified biodiversity corridors in line with provincial spatial planning and conservation goals and priorities.	1	Consider the development of protected and conservation areas in highly sensitive areas. The northern portion of the municipality features a large and highly sensitive area that could benefit from being designated as a protected/conservation area.
		2	Development of a network of biodiversity corridors (in line with district) that connect the proposed protected and conservation areas.
		3	Develop protected areas close to the settlements that are affordable and informative to all communities.

5.3.3 Critical biodiversity areas

Strategy 3	Areas of critical biodiversity	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	Ecosystems provide numerous benefits or ecosystem services that underpin economic development and support human well-being. They include provisioning services such as food, fresh water, and fuel as well as an array of regulating services such as water purification, pollination, and climate regulation. Healthy ecosystems are a prerequisite to sustaining economic development and mitigating and adapting to climate change. The plan provides for activities enabling access to nature and for diversifying farm income in a manner which does not detract from the functionality and integrity of nature and farming areas and landscapes.	Ecosystems provide numerous benefits that underpin economic development and support human well-being. They include the provision of services such as food, fresh water, and fuel as well as an array of regulating services such as water purification, pollination, and climate regulation. Healthy ecosystems are a prerequisite to sustaining economic development and the fight against climate change. The plan provides for activities enabling access to nature and for diversifying farm activities in a manner which does not detract from the functionality and integrity of nature, farming areas and landscapes.
Introduction	A system of biodiversity corridors is proposed to link contiguous or near-contiguous areas of high biodiversity (both terrestrial and aquatic), also aiming to link existing and proposed formally protected areas.	A biodiversity corridor network is aimed to run throughout the municipality. The network will follow the main areas of vulnerable land, fauna and flora (terrestrial and aquatic). Additionally, it will link proposed protected and conservation areas throughout the municipality and will align with the wider district network.
Protect	These areas should be protected from all other forms of inappropriate development.	1 The protection of the critical and highly sensitive areas (terrestrial and aquatic).
Change	Before any change of land use is considered, a detailed specialist study has to be conducted to determine the impacts of the envisaged activity on not only the site but also on the larger area.	1 Analysis and review of the biodiversity corridors. Impact of farming (commercial and subsistence) and settlements needs to be well understood prior to designation and implementation.
New	Before any new non-conservation related activity is considered a detailed specialist study must be conducted to determine the impacts of the envisaged activity on not only the site but also on the larger area.	1 Determination of non-conservation related activities will need to be carried out by the Municipal Planning Tribunal according to the Land Use Management Scheme. Additional motivation and specialist studies will be required to motivate a development.
		2 Designation of areas requiring specialist studies to be conducted. Designated in this

SDF and refined in the Land Use Management Scheme.

5.3.4 Tourism areas

Strategy 4	Tourism areas	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	<p>All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offers a wide range of opportunity and can accommodate growth and change. Other settlements are small, lack sufficient access and service infrastructure, with limited economic opportunities for its residents. Generally, the potential of settlements to contribute to change and improved growth, directly relates to their relationship with natural assets, cultural assets and infrastructure availability. Growth should be encouraged in areas where impacts on existing assets / resources will be the least or where it lends itself to generating new opportunities.</p>	<p>Tourism as a sector has a high potential to benefit communities through both job creation and exchanges in culture and knowledge. As part of the Districts drive to improve tourism, Ratlou Local Municipality can play its own part by developing itself as a destination "off the beaten track" so to speak. It can offer locations that are unique yet accessible to both locals and visitors from afar.</p>
Introduction	<p>The NMM has vast cultural and heritage as well as natural sites which are at the core of the districts tourism sector further to the nature reserves.</p> <ul style="list-style-type: none"> • Thaba Sione with approximately 559 engravings on rocks and boulders • Driekuil Hill which is one of at least twelve sites regarded as the largest and most significant Khoe- San rock art site in the former Western Transvaal • Gestoptefontein Mountain which is a rock art site and forms part of a larger complex of marked outcrops in a landscape that oral traditions imbue with significance • Gestoptefontein Hills which has Khoe-San rock art • Kanonkoppie which is a historical and monument site • Mafikeng Museum rich in Anglo Boer War history • Wondergat which is one of the deepest sinkholes in South Africa. 	<p>Ratlou has a long history of both cultural and natural history. This history has enabled the creation of several sites of importance in both areas. These sites have the potential to create unique tourist offerings. Places such as:</p> <ul style="list-style-type: none"> ▪ Kraaipan South African War museums and battlefield. ▪ Disaneng dam. ▪ Molopo river – part of border corridor (during certain months). ▪ Mareetsane game farms. ▪ Setlhatlwe Sacred Heritage site. ▪ Logageng Game reserve. ▪ Noren Ranch.
Protect	<p>The tourism sector is an important sector of potential economic growth and employment creation and the identified tourism nodes should be protected from any form of inappropriate land use and development that would impact negatively on its tourism function and potential.</p>	<p>1 Areas with historical buildings and monuments should be protected from incompatible uses.</p> <p>2 Cultural spaces such as villages with a history and unique atmosphere should be promoted to provide an alternative destination for local and wider area tourists.</p>

Change	Prior to the extension of tourism nodes and areas, the social and economic impact and contributions thereof should be determined and taken into consideration as well as the existing biodiversity corridors so as to ensure sustainable tourism development and optimum benefits for the environment and people. The potential extension of tourism nodes and areas should also be aligned to the 2010 National Tourism Strategy, 2016 North West VTSD Tourism Plan and municipal goals and priorities.	1	-
New	The development of new tourism areas should ideally be aligned with the identified biodiversity corridors linking the protected core areas.	1	Tourism locations such as the Disaneng dam should be expanded upon. However, the expansion should be controlled and regulated so as not to adversely affect the natural environment.
		2	The utilisation of the Molopo River along the South Africa and Botswana border should be utilised and developed as a tourist destination with recreational activities as an option (hot air ballooning, water activities during certain times of the year etc.).

5.3.5 Agricultural focus areas

Strategy 5		Agricultural focus areas	
	Ngaka Modiri Molema DM strategies		Ratlou LM strategies
Key considerations	All settlements are not the same. Some are large, supported by significant economic and social infrastructure, offers a wide range of opportunity and can accommodate growth and change. Other settlements are small, lack enough access and service infrastructure, with limited economic opportunities for its residents. Generally, the potential of settlements to contribute to change and improved growth, directly relates to their relationship with natural assets, cultural assets and infrastructure availability. Growth should be encouraged in areas where impacts on existing assets / resources will be the least or where it lends itself to generating new opportunities.		Agriculture is an important part of the municipality and the potential to diversify and improve it is clearly visible. Agriculture within the municipality is typically based around commercial farming of grains and crops, some livestock in the central areas of the municipality. Additionally, the municipality features a large subsistence agricultural sector in and around the rural settlements and villages who rely upon it. This is an important sector in the municipality and is an essential area of focus for the present and future of the municipality's well-being.
Introduction	Agriculture forms an integral part of the NMMDM's economy. The district is best suited for livestock with areas to the south and southeast of the district suitable for arable agriculture such as maize, groundnuts and sunflower seeds.		Agriculture forms an integral part of Ratlou's economy. The municipality is best suited for arable agriculture such as maize, groundnuts and sunflower seeds. Some level of livestock farming also occurs. The other large category of agricultural activity is subsistence farming which takes place in small rural settlements and traditional authority areas across the municipality.
Protect/Change	Commercial irrigated agriculture and commercial dryland agriculture (in areas of moderate potential arable land): These areas should not be used for other types	1	The commercial irrigated agricultural areas, which make up a large portion of the commercial agricultural type in the

<p>of development and agriculture should be prioritised above all other types of activities and developments. Crop farming should be encouraged and where relevant, irrigation potential should be optimised.</p> <p>Commercial dryland agriculture (in areas of marginal arable land) and extensive agriculture (e.g. grazing, wildlife) in non-arable areas: Agriculture should remain the main focus within this zone and should be prioritised above other types of activities and developments. Land within this zone may however also be potentially considered for other types of development, subject to the provisions of relevant legislation and policies.</p> <p>Subsistence agriculture: Existing subsistence agricultural activities should not be jeopardized by any other alternative form of land use. Support should be provided to encourage more intensive agriculture and sustainable farming practices.</p>		<p>municipality, should be protected and conserved exclusively for this activity.</p>
	2	Irrigation should be expanded, where suitable, to improve the productivity of the agricultural activities.
	3	Subsistence agricultural areas should be integrated into the irrigation network.
	1	The grazing potential for Ratlou is high and underutilised when compared to neighbouring municipalities (Naledi and Tswaing).
	2	Grazing in highly sensitive, protected and conservation areas needs to be deterred (cattle farming).
	3	Rehabilitation of grain silos and other supporting agricultural infrastructure along the railway line.
	1	Subsistence agriculture in the municipality needs to be supported due to its importance to communities across the municipality. Possible augmentation of land surrounding settlements for agricultural purposes (when viable).
	2	Support, provided by the Agri hub (Springbokpan – Ditsobotla) and FPSUs (Madibogo and Kraaipan), are essential to the longer-term sustainability and resilience of subsistence farmers.
	3	Subsistence farms within the municipality need to be regulated and guided through both the land use scheme and tribal land use approaches to allow for efficient use of land and the protection of land from undesirable development.

5.3.6 Mining areas

Strategy 6	Mining areas	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	Mining operations has clear life cycles and it is important to plan not just for the exploration but also for closer.	Mining in Ratlou is limited in its formal extent. However, there are several illegal and small-scale sand mining activities near to rivers (non-perennial) in the municipality. Thus, the social, environmental and infrastructure impacts of mining are crucial.
Introduction	District to consider	Mining in Ratlou is near exclusively made up of the Kalgold gold mine and small-scale sand mining operations. This mine is the only large scale mine of its type in the wider region. Several very small (registered status unknown) mines are present in the municipality.

Protect	Mining activities should as far as possible, be confined to the identified mining focus area and should be conducted in a sustainable manner.	1	Kalgold and small-scale mining areas should be limited in their expansion where it is potentially damaging to the environment.
Change	Any mining activities that reach the end of its operational lifespan should be rehabilitated and managed in accordance with the Mineral and Petroleum Resources Development Act No. 28 of 2002 read together with the Mineral and Petroleum Resources Development Regulations No R. 527 dated 23 April 2004.	1	Mines, as part of their mining operations and closure plan, should clearly state the intended process and outcome for the mine once the closure process has been initiated.
		2	Kalgold in specific needs specific focus considering its spatial, economic and social impact. Aggregates produced in Kalgold, due to its open cast nature, could be utilised within the municipality for other uses (construction materials etc.).
		3	Regulation and formalisation of the sand mining in the area can aid in environmental impact that this has but also still maintain the socio-economic benefits it brings.
New	Wetlands, areas in proximity to aquatic features, areas of high or sensitive biodiversity, and areas of sensitive topography should be avoided at all costs in the development of any new mining areas.	1	New mining developments should only occur near current and existing operations. The determination of expansion should be assessed strictly.
		2	Protected, conservation, vulnerable fauna and flora, and areas of high sensitivity should be avoided when considering new mining operations.
		3	New mining operations in the municipality should be encouraged where it is suitably, both in terms of an environmental approach but also socio-economically to have the most benefit.

5.3.7 Revitalisation of rural areas

Strategy 7	Revitalisation of rural areas	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	The rural areas of the district, inclusive of settlements located on Traditional Authority land, are experiencing significant challenges in terms of infrastructure and economic opportunities.	The rural areas of Ratlou, as with many rural areas of the district and the province, are experiencing several challenges. This is due to the lack of physical infrastructure, economic development, resources, limited education and skills and several social limitations.
Introduction	District to consider	Rural areas in Ratlou, making up much of the population, are an important part of the functioning of industries and activities that support the main settlements and villages of the municipality. The rural settlements include settlements located on tribal authority land in the northern and southern areas of the municipality.
Protect	District to consider	1 Protect the social fabric of communities. Avoid disrupting communities in the name of spatial efficiency.
		2 Protect the communities from external natural events such as flooding, fires etc. through community-based planning. Encourage the community to become involved in their own planning.

Change	District to consider	1	Diversify rural activities beyond simply agriculture, agro-processing and resource extraction. Encourage entrepreneurship of alternative industries/economic activities such as tourism, micro-industries etc.
New	District to consider	1	Expand agricultural programs to support and develop a sustainable, equitable and competitive (create a path towards large scale farming activities) subsistence sector. Incorporate the Traditional Authorities into the programs.
		2	Encourage new, smaller scale rural activities in tourism. Small-scale community level tourist areas in places of historical and cultural significance (Kraaipan etc.).

5.3.8 Service delivery and maintenance

Strategy 8	Service delivery and maintenance		
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies	
Key considerations	Bulk infrastructure provision is a function of the District. It is imperative that existing infrastructure be assessed, and maintenance plans be put in place.	Bulk infrastructure provision is a function of the District. It is imperative that existing infrastructure be assessed, and maintenance plans be put in place.	
Introduction	District to consider	Bulk infrastructure maintenance and development should be focused on areas where growth is expected or can be easily created (Setlagole and Madibogo and Disaneng).	
Protect	District to consider	1	Maintain the existing networks throughout the municipality and special focus given to strategic infrastructure resources.
		2	Protect the infrastructure that makes the largest difference to the functioning and community benefit in the municipality.
Change	District to consider	1	Alter the focus of delivery from a "watering can" approach to a more strategically focused one. Not to underserve communities but to rather maximise resource allocation.
New	District to consider	1	Expand the networks off the established infrastructure network into areas lacking services. This should be focused in areas where it makes the most strategic sense.
		2	Encourage the development of self-sustaining "micro-grids" (electricity, water and sanitation) supplied by the district, Eskom and water service providers in areas and settlements that are costly to supply directly and reach.

5.3.9 Catalytic areas

Strategy 9	Catalytic areas that offer extensive opportunity and address present risk	
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies
Key considerations	<p>Planning cannot attempt to treat all areas equally. Some areas offer more opportunity for more people than others. We need to focus on the areas and actions where a significant number of people will benefit, and where we will meet their needs. There is also a need to focus on areas of 'deep' need, notwithstanding location, where limited opportunity poses a risk to livelihoods. Some informal settlements and poorer areas may not be located to offer the best chance for inhabitants, yet services need to be provided and maintained here. However, significant new development should not occur in these places, exacerbating undesirable impacts or further limiting the opportunity for people to pursue sustainable livelihoods.</p>	<p>Planning cannot attempt to treat all areas equally. Some areas offer more opportunity for more people than others. Focus on the areas and actions where a significant number of people will benefit, and where we will meet their needs. There is also a need to focus on areas of 'deep' need, notwithstanding location, where limited opportunity poses a risk to livelihoods. Some informal settlements and poorer areas may not be located to offer the best chance for inhabitants, yet services need to be provided and maintained here. However, significant new development should not occur in these places, exacerbating undesirable impacts or further limiting the opportunity for people to pursue sustainable livelihoods.</p>
Introduction	District to consider	Ratlou Local Municipality is a largely underserved and underutilised, in terms of its potential. Certain areas, such as Setlagole and Madibogo, offers a large potential for any large or catalytic projects. However, these areas although offering a large population, do lack some basic features to allow them to truly excel in the wider environment (regionally). Ratlou also features places that are dispersed and lack any type of base to develop from. These places require support in order to operate but lack any realistic ability to become growth points within the municipality and beyond.
Protect	District to consider	1 Protect the areas that offer some basic level of opportunity. Protect the basic physical, social, economic and environmental systems in these areas (Setlagole and Madibogo).
Change	District to consider	1 Encourage spaces that lie in limbo between strong and weak spaces to move up and into an improved position. The settlements of Kraaipan and Disaneng are such examples that has the potential to move into this position.
New	District to consider	1 The new implies in this case the development of mitigating approaches in areas that are inherently weak but must be provided for. These spaces are extremely difficult to radically alter and move into the middle or strong catalytic area type. A large portion of the municipality lies within this.
		2 Disaneng and Kraaipan has the potential to move into an improved position but this is only possible if a number of basic elements are created.

		3	The remaining isolated settlements in the municipality are, unfortunately, highly unlikely to become catalytic areas and must instead be supported and provided for in basic yet sustainable ways.
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5.3.10 Movement and connectivity

Strategy 10	Movement routes and connectivity		
	Ngaka Modiri Molema DM strategies	Ratlou LM strategies	
Key considerations	District to consider	In connecting of places and spaces, the movement and connectivity network is an essential element to the functioning of an area. A well established and maintained movement and connectivity network allows for the effective and safe transport of both goods and services. A final important element to take cognisance of is that a movement and connectivity network is not equal in all parts. This is demonstrated in the use of a hierarchy in which certain routes within the network are deemed more important than others due to traffic, amount transported/moved, quality etc.	
Introduction	District to consider	The movement and connectivity network within the municipality is made up of the following hierarchy: <ul style="list-style-type: none"> ▪ National mobility route: N18 (transfrontier corridor) ▪ Regional mobility route: R507 (Setlagole civic corridor) ▪ Main route: R375 (Mareetsane corridor), R376 ▪ Minor route: D414 and 2951 (Kraaipan cultural corridor) ▪ Railway route: Mahikeng to Vryburg 	
Protect	District to consider	1	The key national and regional routes should be prioritised for regular maintenance within the municipality.
		2	The railway route within the municipality should be maintained to maintain its role within the agricultural system in the wider region.
Change	District to consider	1	Focus within the network should be maintained largely in the southern portion of the municipality along the N18. However, additional focus should be shifted towards the northern portion of the municipality. This focus should be around the D414 in its entirety till Mabule in the west.
New	District to consider	1	The interconnection of the movement and connectivity network in the south and north of the municipality should be a focus in this regard. This may be achieved through the development of the north-south connection route from Disaneng to Setlagole via the N18.

5.4 Land Use Budget

The compilation of a land use budget consisted of an analysis and assessment of the current shortage of serviced erven, the additional land requirement in the 2020-2025 SDF period as well as the need for detailed planning in the implementation period (2025-2030).

The total space required for integrated human settlements, including residential stands, open space and park systems, the entire hierarchy of streets, all amenities and social facilities as well as trade and industrial space requirements was determined by assessing residential requirements and then using a gross density of 25units/ha to derive the total land required. Population and household threshold figures are derived from CSIR Guidelines (CSIR Space Planner, 2019).

This assessment was conducted for both the entire municipality and each main settlement.

The land use budget is presented in **Table 15: Land Use Budget For Ratlou Municipal Area**. This includes an overall land use budget for the entirety of the municipality dealing with formal erven, informal housing, farm dwellings, small holdings, provision requirements (subsidy housing), vacant erven, industrial, offices and social facilities.

TABLE 15: LAND USE BUDGET FOR RATLOU MUNICIPAL AREA

	Numbers (Rounded to closest 100)			Additional Space (ha) Required (Rounded)		
	Households 2019	Additional households - conservative scenario 2025	Additional households - conservative scenario	2019	Conservative Scenario 2025	Conservative Scenario 2030
RESIDENTIAL ASSESSMENT						
Formal erven ³	800					
Backyard shacks and second dwellings ⁴	2 100	2 700	2 800			
Informal dwellings ⁵	500					
Traditional/Tribal Authority dwellings ⁶	25 400					
Farm dwellings ⁷	1 100					
Collective living quarters ⁸	0					
Small holdings ⁹	0					
Miscellaneous dwellings (commercial, etc) ¹⁰	100					
Sub-Total¹¹	30 000	38 900	40 400			
Demand						
Bonded housing ¹²		20	0			
FLISP housing required ¹³	950	280	50			
Subsidy housing required ¹⁴	780	8 600	1 450			
Total demand for formal erven	1 730	8 900	1 500			
Supply						
Vacant erven (bonded market) ¹⁵	0					
Infill opportunity (bonded market) ¹⁶	20					
Infill via backyard rental market on new stands ¹⁷	140	620	100			
Total erven and gross space to be provided for in SDF which includes:¹⁸	1 570 erven	8 280 erven	1 400 erven	60 ha	330 ha	60 ha
INDUSTRIAL ASSESSMENT¹⁹					4	
OFFICE AND TRADE ASSESSMENT²⁰					4	
SOCIAL FACILITY ASSESSMENT²¹					11	3
Developed Parks from standards ²²					5	2
Sports Areas from standards ²³					5	2

The Land Use allocation for each of the four settlement areas within the municipality is indicated below. This illustrates how the allocation is divided between the four settlements based on a percentage allocation until 2030. The percentage allocation is further detailed through the number of hectares (ha) that each settlement should be allocated for additional social services and new residential development (refer to **Table 16: Land Use Budget Allocation For Ratlou Municipal Area**).

³ 2019 SG Data

⁴ Aerial Photography Sampled to estimate % & Verification CS 2016 Table 14

⁵ 100% digitised by Cadre 2019 verified with Census data and CS 2016 Table 14

⁶ Census data projection (Table 10&26)

⁷ Census data projection (Table 10&26)

⁸ Census data projection (Table 10&26)

⁹ Census data projection (Table 10&26)

¹⁰ Census data projection (Table 10&26)

¹¹ 2019 projected Census data; Greenbook Medium Growth Scenario

¹² Households earning above R264 000 pm based on 2011 percentage

¹³ % of households earning between R42 000-R264 000 pm (2019 values) (Table 15) Census projection

¹⁴ Informal dwellings in and around urban areas and 1% migration from tribal authority area to main towns

¹⁵ Counted from 2019 aerial by Cadre

¹⁶ Vacant formal space assessment Cadre

¹⁷ Current norm of 26% of formal erven used for this purpose

¹⁸ Gross density of 25 units/ha

¹⁹ Provincial SDF 2017

²⁰ Provincial SDF 2017

²¹ CSIR Space Planner (Included in gross density)

²² CSIR Space Planner

²³ CSIR Space Planner

TABLE 16: LAND USE BUDGET ALLOCATION FOR RATLOU MUNICIPAL AREA

Settlement	% allocation	ha allocated			Total ha per settlement
		2019	2025	2030	
Setlagole	50%	30	165	30	225
Madibogo	40%	24	132	24	180
Kraaipan	10%	6	33	6	65
Remaining Settlements*	Discretionary	n/a	Discretionary	Discretionary	Discretionary
TOTAL	100%	60	330	60	450

*remaining settlements include Disaneng, Tshidilamolomo and Mareetsane. The discretionary nature of the smaller settlements will depend on community consultation and allocated on an as needed basis, without a total deviation on the totals above two percent (2%).

The social facility count (fire station, clinics, schools etc.) requirements for the entire Ratlou, until 2030, is indicated below. This gives an indication of the total number and area (ha) of facilities required (refer to **Table 17: Social Facility Requirements**). The numbers recorded in the table are rounded off figures using CSIR Space Planner parameters. It does not take into consideration any backlog or current available facilities but rather the total required social facilities according to the populations in 2019, 2025 and 2030.

TABLE 17: SOCIAL FACILITY REQUIREMENTS

Name	CSIR Parameters		2019		2025		2030	
	Population threshold per facility	Hectares per facility	Facilities required	Hectares required (ha)	Facilities required	Hectares required (ha)	Facilities required	Hectares required (ha)
Fire Station	100000	0,3	1,107	0,33195	1,197	0,35921	1,242	0,37252
Police Station	60000	0,5	1,844	0,92209	1,996	0,99781	2,070	1,03478
Regional Library - reference	100000	0,56	1,107	0,61965	1,197	0,67053	1,242	0,69537
Local Library	20000	0,05	5,533	0,27663	5,987	0,29934	6,209	0,31043
Major public venue	1000000	2	0,111	0,22130	0,120	0,23947	0,124	0,24835
Tertiary Hospital	4500000	35	0,025	0,86062	0,027	0,93129	0,028	0,96579
Regional Hospital	1000000	7	0,111	0,77456	0,120	0,83816	0,124	0,86921
Hospital L1	450000	5	0,246	1,22945	0,266	1,33041	0,276	1,37970
Community Health Centre and ARV	60000	1,5	1,844	2,76627	1,996	2,99343	2,070	3,10433
Primary Health Clinic	30000	0,5	3,688	1,84418	3,991	1,99562	4,139	2,06955
International sports complex	1500000	3	0,074	0,22130	0,080	0,23947	0,083	0,24835
Indoor Sports Halls	500000	0,5	0,221	0,11065	0,239	0,11974	0,248	0,12417
Swimming Pool	60000	0,16	1,844	0,29507	1,996	0,31930	2,070	0,33113
Sports Stadium	200000	3	0,553	1,65976	0,599	1,79606	0,621	1,86260
Sports Fields	1000	0,56	110,651	61,96450	119,737	67,05272	124,173	69,53688
Park Space	1000	0,5	110,651	55,32545	119,737	59,86850	124,173	62,08650
University	1000000	8	0,111	0,88521	0,120	0,95790	0,124	0,99338
Tertiary Training not Univ	100000	1	1,107	1,10651	1,197	1,19737	1,242	1,24173

Secondary School	12500	4,8	8,852	42,48995	9,579	45,97901	9,934	47,68243
Primary School	5500	2,8	20,118	56,33137	21,770	60,95702	22,577	63,21535
High income Creche/early Childhood	3000	0,05	36,884	1,84418	39,912	1,99562	41,391	2,06955
Low income Creche/early Childhood	2400	0,02	46,105	0,92209	49,890	0,99781	51,739	1,03478
Home Affairs - regional office	140000	0,5	0,790	0,39518	0,855	0,42763	0,887	0,44348
Home Affairs - District office	80000	0,2	1,383	0,27663	1,497	0,29934	1,552	0,31043
Home Affairs - Permanent Service point	20000	0,05	5,533	0,27663	5,987	0,29934	6,209	0,31043
Home Affairs - Thusong Centre	20000	0,05	5,533	0,27663	5,987	0,29934	6,209	0,31043
Sisakala - Thusong	500000	0,16	0,221	0,03541	0,239	0,03832	0,248	0,03974
Sisakala - First Stop - urban	100000	0,01	1,107	0,01107	1,197	0,01197	1,242	0,01242
Sisakala - One Stop	500000	0,05	0,221	0,01107	0,239	0,01197	0,248	0,01242
Sisakala - First Stop - rural	30000	0,006	3,688	0,02213	3,991	0,02395	4,139	0,02483
Cemetery	50000	8	2,213	17,70414	2,395	19,15792	2,483	19,86768
Community Centre	30000	0,3	3,688	1,10651	3,991	1,19737	4,139	1,24173
Religious Centre	3000	0,1	36,884	3,68836	39,912	3,99123	41,391	4,13910
Old age Home	50000	2	2,213	4,42604	2,395	4,78948	2,483	4,96692
Children's Home	60000	1	1,844	1,84418	1,996	1,99562	2,070	2,06955
Civic Centre / City hall	100000	1	1,107	1,10651	1,197	1,19737	1,242	1,24173
Municipal Office	100000	0,3	1,107	0,33195	1,197	0,35921	1,242	0,37252
Total hectares				265		286		297

Proceeding from the previous component of total facilities required, additional social facilities (sports fields, creches, religious centres etc.) are also provided for in terms of future allocation requirements (this works on a zero assumption that all previous social facilities are accounted for and only additional facilities are required). This is also shown in the number and area (ha) of social facilities required in Ratlou until 2030) (all numbers have been rounded off) (refer to **Table 18: Additional Social Facilities**).

TABLE 18: ADDITIONAL SOCIAL FACILITIES

Name	CSIR Parameters		2019 to 2025		2025 to 2030		total (2019 to 2030)	
	Population threshold per facility	Hectares per facility	Facilities required	Hectares required (ha)	Facilities required	Hectares required (ha)	Facilities required	Hectares required (ha)
Local Library	20000	0,05	0	0,00	0	0,00	1	0,05
Sports Fields	1000	0,56	9	5,04	4	2,24	14	7,84
Park Space	1000	0,5	9	4,50	4	2,00	14	7
Secondary School	12500	4,8	1	4,80	0	0,00	1	4,8

Primary School	5500	2,8	2	5,60	1	2,80	2	5,6
High income Creche/early Childhood Centre	3000	0,05	3	0,15	1	0,05	5	0,25
Low income Creche/early Childhood development centre	2400	0,02	4	0,08	2	0,04	6	0,12
Home Affairs - Permanent Service point	20000	0,05	0	0,00	0	0,00	1	0,05
Home Affairs - Thusong Centre	20000	0,05	0	0,00	0	0,00	1	0,05
Religious Centre	3000	0,1	3	0,30	1	0,10	5	0,5
			31	20,47	13	7,23	50	26,26

*There will also be a magistrate's court built in Setlagole in the course of the next 5 years, facilitated by the Department of Public Works.

The final component of the Land Use Budget is the social facilities allocation for the three main settlements. This, as with the prior social facilities allocations, indicates the number of additional social facilities required (with the assumption of a zero base) according to the land use budget allocation in **TABLE 16**. Please note that the remaining settlements should be considered and allocated on an as needed basis when required. (refer to **Table 19: Additional Social Facilities Per Settlement**).

TABLE 19: ADDITIONAL SOCIAL FACILITIES PER SETTLEMENT

Settlement	% allocation	Sports Fields	Park Space	Secondary School	Primary School	High income Creche/ early Childhood Centre	Low income Creche/ early Childhood development centre	Religious Centre
2019 to 2025 additional social facilities	100%	9,1	9,1	0,7	1,7	3,0	3,8	3,0
Setlagole	50%	5	5	0	1	2	2	2
Madibogo	40%	4	4	0	1	1	2	1
Kraaipan	10%	1	1	0	0	0	0	0
2025 to 2030 additional social facilities	100%	4,4	4,4	0,4	0,8	1,5	1,8	1,5
Setlagole	50%	2	2	0	0	1	1	1
Madibogo	40%	2	2	0	0	1	1	1
Kraaipan	10%	0	0	0	0	0	0	0
2019 to 2030 total additional social facilities	100%	13,5	13,5	1,1	2,5	4,5	5,6	4,5
Setlagole	50%	7	7	1	1	2	3	2
Madibogo	40%	5	5	0	1	2	2	2
Kraaipan	10%	1	1	0	0	0	1	0

5.5 Spatial Development Framework

5.5.1 Municipal Spatial Development Framework

The municipal spatial development framework (refer to **Figure 45: Ratlou Municipal Spatial Development Framework**) is a culmination of all the previous sections contained in this report. It provides a refined spatial framework of the entirety of the municipality with specific focuses on the priority settlement areas.

The development of the SDF for the municipality and specific areas builds upon the detailed analysis and its outcomes, spatial vision, spatial concepts, spatial strategies, and land use budget. The SDF has remained in line with the several structuring elements utilised in the spatial concepts with many refinements. The SDF comprises of the following structuring elements: (1) Nodes and centres (settlements and villages); (2) movement and connectivity (roads and rail); and (3) spatial areas (agriculture, conservation, etc.) and various unique components.

The first structuring element (nodes and centres) highlights the important towns, settlements, or landmarks. They function as nodal points within the municipality and generally include large populations, and important activities and industries, crucial to the functioning of the municipal area. The SDF for the municipal area shows the following:

- First order:
 - Setlagole; and
 - Madibogo.
- Second order:
 - Kraaipan;
 - Mareetsane;
- Third order:
 - Disaneng;
 - Mokgobistad; and
 - Tshidilamolomo.
- Fourth order:
 - Remainder of villages and settlements in the municipality.
- Tourism nodes:
 - Kraaipan (SA war museum); and
 - Disaneng dam.
- Mining nodes:
 - Kalgold.
- Human settlements - settlement improvement allocations/types (refer to **Table 20: Settlement improvement allocations/types**):
 - Established but not yet proclaimed erven; and
 - Settlement expansion.

TABLE 20: SETTLEMENT IMPROVEMENT ALLOCATIONS/TYPES

Legend	Town	Size (ha)
Unproclaimed erven	Madibogo	43,3
Settlement expansion	Madibogo	95
Unproclaimed erven	Madibogo	131,5
Unproclaimed erven	Setlagole	214,5
Settlement expansion	Setlagole	115
Settlement expansion	Kraaipan	65
Settlement expansion	Madibogo	85
Settlement expansion	Setlagole	110

The second structuring element (movement, connectivity and corridors) can be understood to be the network that connects the first element.

- National mobility routes:
 - N18 (Transfrontier corridor).
- Regional mobility route:
 - R507 (Setlagole civic corridor).
- Main routes:
 - R376;
 - R375 (from N18 southwards – Mareetsane corridor); and
 - 2951 Road (Kraaipan cultural corridor).
- Railway network.
- Priority linkage routes:
 - R375 to Disaneng route; and
 - D414.

The final and third structuring element (spatial areas) can be understood to be the designation of areas of land into various types, generally based on current or proposed uses.

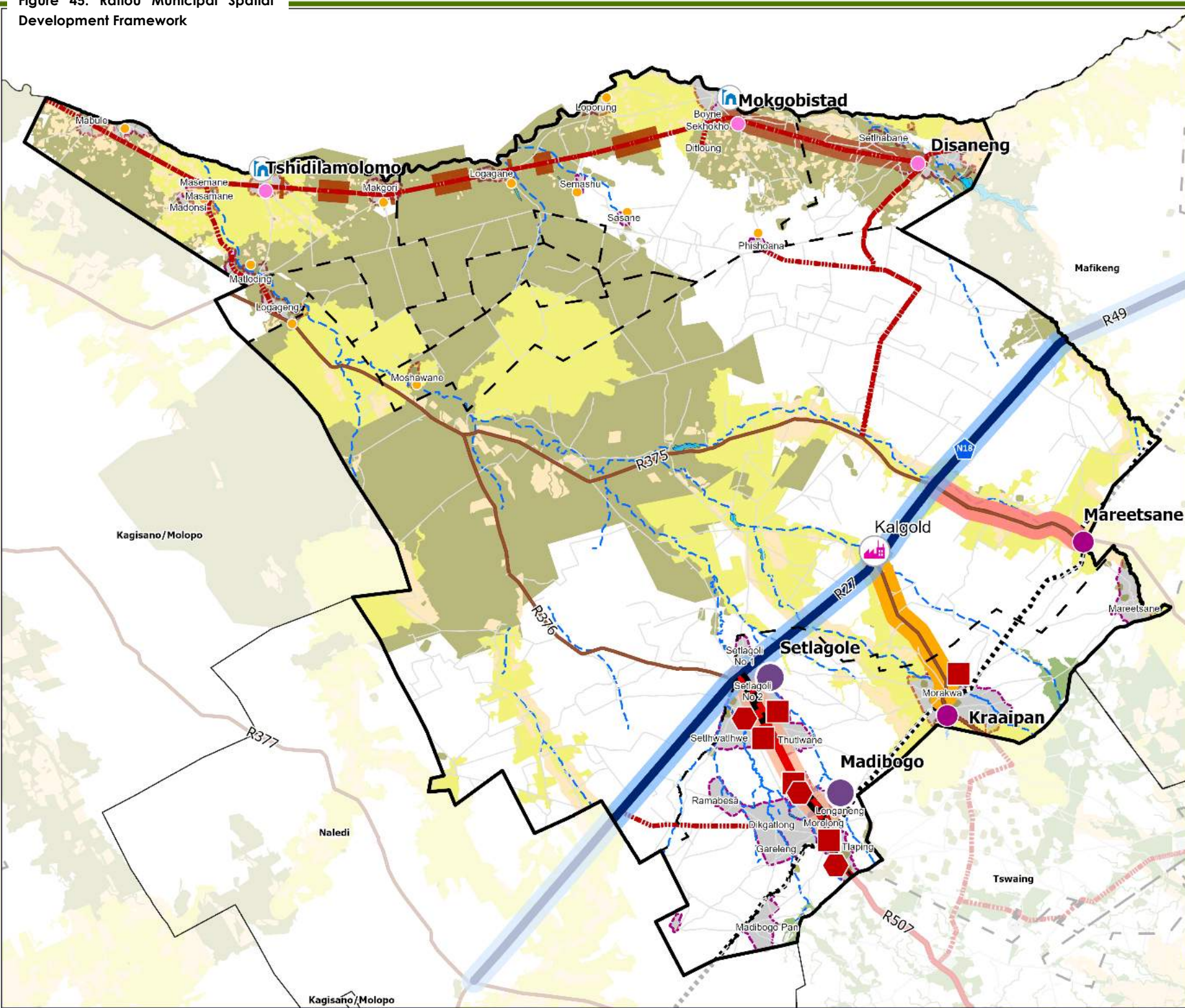
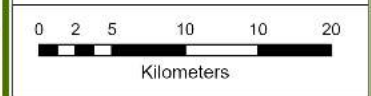
- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- Mining areas (landcover).

Figure 45: Ratlou Municipal Spatial Development Framework



Spatial Development Framework

- LEGEND**
- Settlement expansion
 - ⬡ Unproclaimed Erven
 - Part of Entry
 - Kalgold
 - Fourth order
 - Third order
 - Second order
 - First order
 - Secondary roads
 - Main Roads
 - Regional mobility
 - Priority Linkage road
 - Activity route
 - Regional mobility
 - National mobility route
 - Mareetsane Gateway corridor
 - Setlagole Civic Corridor
 - N18 Transfrontier Corridor
 - Kraaipan Cultural corridor
 - Border Corridor
 - Extended Border Corridor
 - Railway
 - Rivers
 - Traditional Authorities
 - Dams & water bodies
 - Existing settlement area
 - Municipal boundary
 - Environmentally Sensitive area
 - Critical Biodiversity Area 1
 - Critical Biodiversity Area 2
 - Ecological Support Area 1
 - Ecological Support Area 2



5.5.2 Development plans

The development plans are aimed at providing additional detail for certain areas within the municipality. These areas follow the areas focused on during the status quo analysis, spatial concepts, and the land use budget. These frameworks aim to allocate potential areas of where improvements and spatial proposals could occur in a more accurate and defined manner.

5.5.2.1 Setlagole and Madibogo

The development plans (refer to **Figure 46: Setlagole and Madibogo Development Plan (Setlagole)** and **Figure 47: Setlagole and Madibogo Development Plan (Madibogo)**) for Setlagole and Madibogo provides greater detail and accuracy from the spatial concept in the previous section.

The first structuring element (nodes and centres) is at a focused local or neighbourhood level and includes the following in Setlagole and Madibogo:

- Node(s):
 - N18 and R507 (Setlagole commercial hub);
 - N18 and R376 (Activity node);
 - R507 (Setlagole civic node);
 - Municipality;
 - Educational facilities; and
 - Community sports centre.
 - R507 (Madibogo entrance from Setlagole – activity node); and
 - Railway and R507 (Madibogo gateway node).
 - Silos and Farmer Production Support Unit.
 - All these nodes have the potential to cater for any future possible development related to economic activities. This is, however, market dependent.
- Settlement edge:
 - The settlement edge aims to contain unsustainable development and encourage formalisation of everything within its border. This should additionally encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.
- Human settlements:
 - Established but not yet proclaimed erven; and
 - Settlement expansion.

SETLAGOLE AND MADIBOGO SETTLEMENT IMPROVEMENT ALLOCATIONS/TYPES

Legend	Town	Size (ha)
Unproclaimed erven	Madibogo	43,3
Settlement expansion	Madibogo	95
Unproclaimed erven	Madibogo	131,5
Unproclaimed erven	Setlagole	214,5
Settlement expansion	Setlagole	115
Settlement expansion	Madibogo	85
Settlement expansion	Setlagole	110

The second structuring element (movement and connectivity) includes the following in Setlagole and Madibogo:

- National mobility routes:
 - N18 (transfrontier corridor).
- Regional mobility route:
 - R507 (Setlagole civic corridor).
- Feeder routes:

- Internal routes (Setlagole and Madibogo).
- Road upgrading (tarring, maintenance, or improved grading).
- Railway network (Madibogo).
- Activity routes:
 - R507 (Setlagole – between N18 and Setlagole civic node); and
 - R507 (Madibogo – between entrance node and Madibogo gateway node).

The final and third structuring element (spatial areas) includes the following in Setlagole and Madibogo:

- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- Mining areas (landcover).
- River system and associated dams – used by local community for agricultural purposes.

The entirety of the two framework areas are designated as a priority enforcement area for the municipal land use scheme.

Figure 46: Setlagole and Madibogo Development Plan (Setlagole)



Setlagole Development Plan

LEGEND

- Settlement expansion
- Unproclaimed Erven
- Nodes**
- Activity Node
- Civic Node
- Commercial Hub
- Feeder Routes
- Secondary roads
- Main Roads
- Regional mobility
- Setlagole Civic Corridor
- N18 Transfrontier Corridor
- National mobility route
- Activity route
- Rivers
- Traditional Authorities
- Area for Settlement expansion
- Dams & water bodies
- Mining Landcover
- Established erven but not proclaimed
- Existing settlement area
- Environmentally Sensitive area**
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2

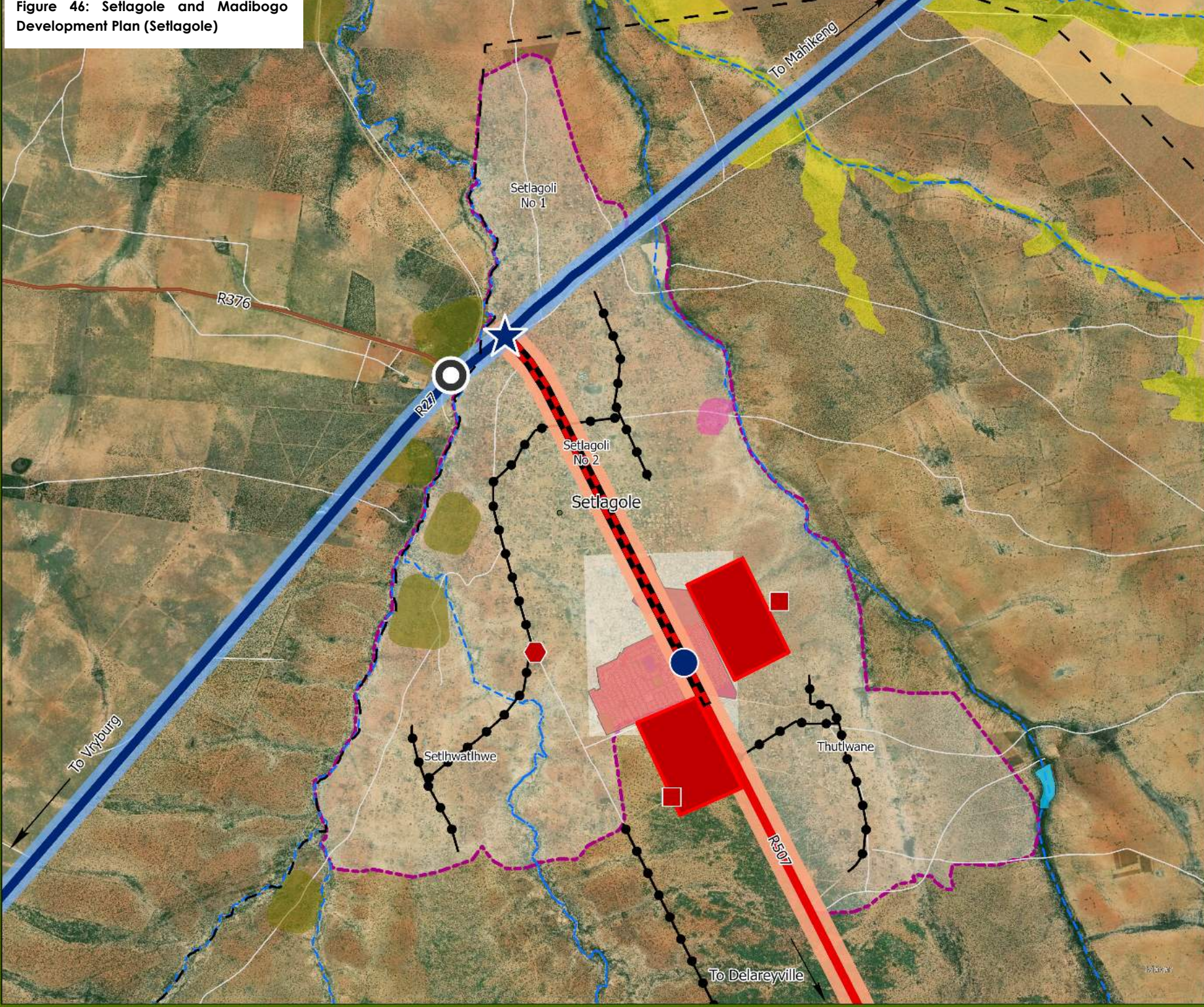
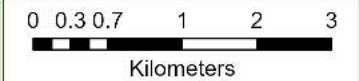


Figure 47: Setlagole and Madibogo Development Plan (Madibogo)



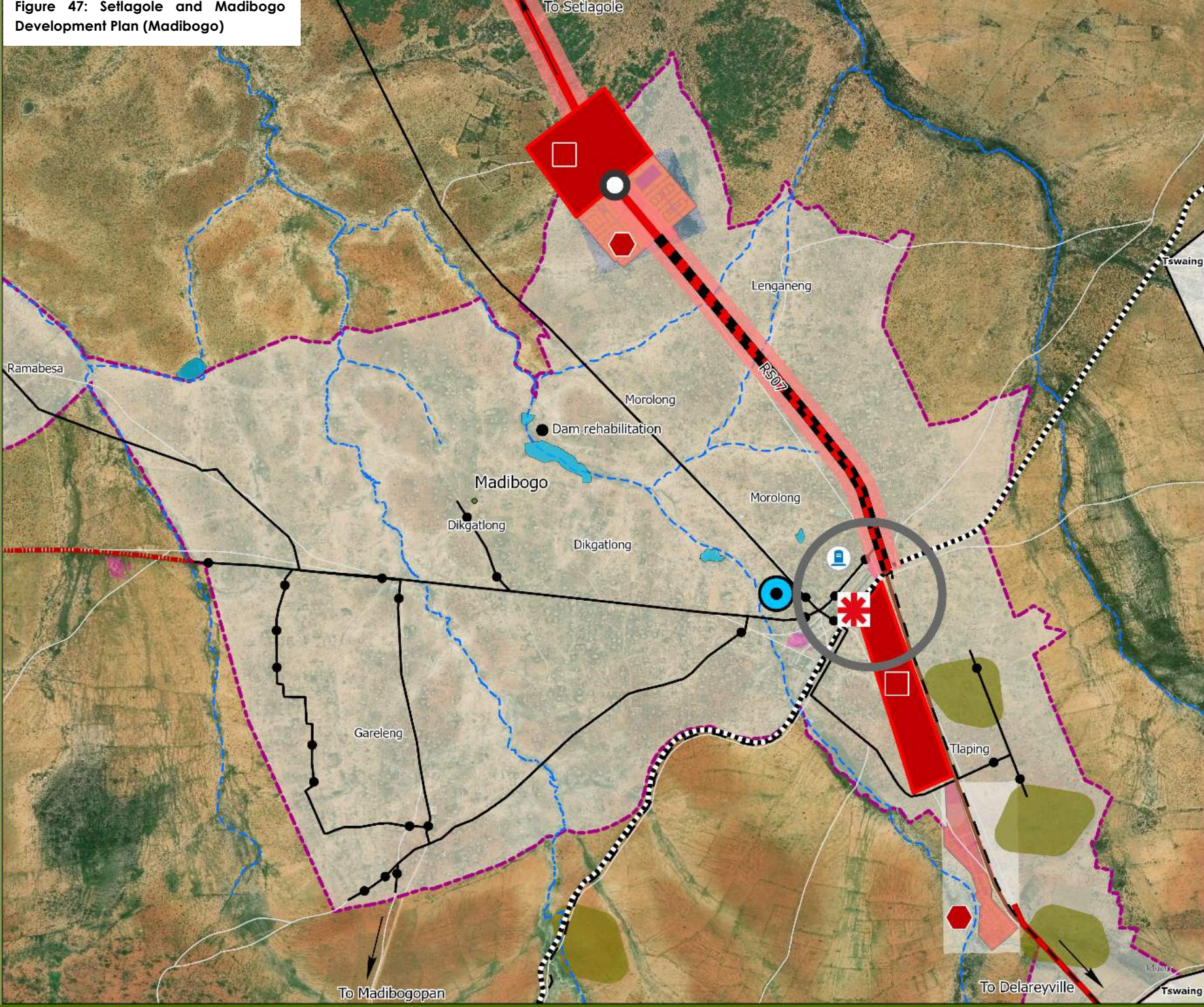
Madibogo Development Plan

LEGEND

- Settlement expansion
- Unproclaimed Erven
- Slios
- Farmer Production Support Unit
- Nodes**
- Activity Node
- Gateway Node
- Village rail hub
- Feeder Routes
- Secondary roads
- Main Roads
- Regional mobility
- Setlagole Civic Corridor
- Activity route
- Regional mobility
- Railway
- Priority Linkage road
- Traditional Authorities
- Area for Settlement expansion
- Dams & water bodies
- Mining Landcover
- Established erven but not proclaimed
- Existing settlement area
- Environmentally Sensitive area
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2



Date Created: 2020/08/05



5.5.2.2 Kraaipan

The development plan (refer to **Figure 48: Kraaipan Development Plan**) for Kraaipan provides greater detail and accuracy from the spatial concept in the previous section.

The first structuring element (nodes and centres) is at a focused local or neighbourhood level and includes the following in Kraaipan:

- Node(s):
 - Kraaipan cultural node (SA War museum); and
 - Village rail hub and Farmer Production Support Unit.
- Settlement edge:
 - The settlement edge aims to contain unsustainable development and encourage formalisation of everything within its border. This should additionally encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.
- Human settlements:
 - Settlement expansion.

KRAAIPAN SETTLEMENT IMPROVEMENT ALLOCATIONS/TYPES		
Legend	Town	Size (ha)
Settlement expansion	Kraaipan	65

The second structuring element (movement and connectivity) includes the following in Kraaipan:

- Main route:
 - Road from N18 – 2951 Road (Kraaipan cultural corridor).
- Feeder routes:
 - Internal routes.
 - Road upgrading (tarring, maintenance, or improved grading).
- Railway network.

The final and third structuring element (spatial areas) includes the following in Kraaipan:

- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- River system and associated dams – used by local community for agricultural purposes.

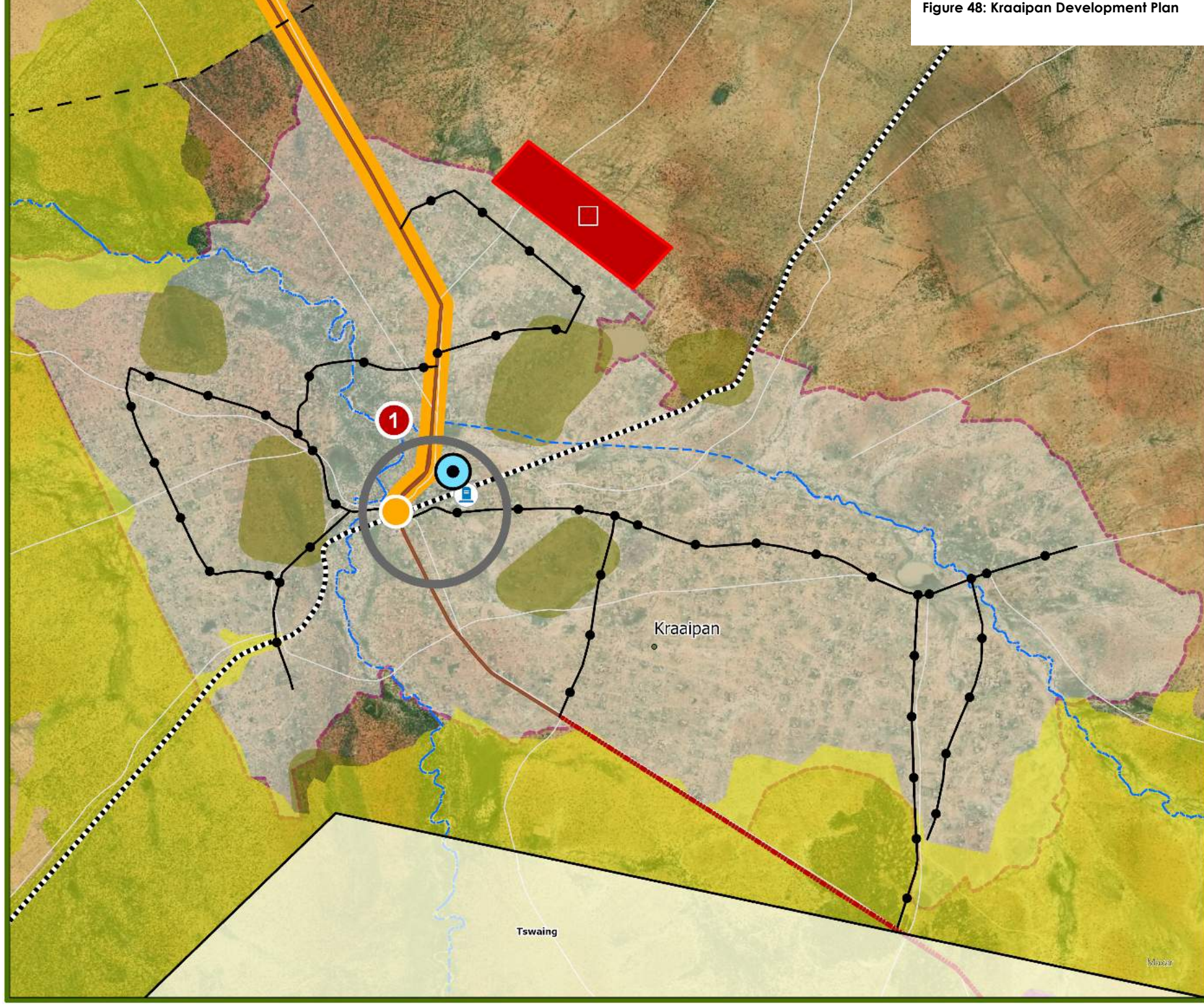
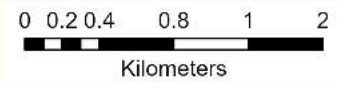
The entirety of this framework area is designated as a priority enforcement area for the municipal land use scheme.

Figure 48: Kraaipan Development Plan



Kraaipan Development Plan

- LEGEND**
- Settlement expansion
 - Silos
 - Farmer Production Support Unit
 - Nodes**
 - Cultural Node
 - Village rail hub
 - Priority formalisation zone 1
 - Feeder Routes
 - Secondary roads
 - Railway
 - Rivers
 - Priority Linkage road
 - Area for Settlement expansion
 - Existing settlement area
 - Municipal boundary
 - Cultural corridor
 - Environmentally Sensitive area**
 - Critical Biodiversity Area 1
 - Critical Biodiversity Area 2
 - Ecological Support Area 1
 - Ecological Support Area 2



5.5.2.3 Mareetsane and Batho-Batho

The Development Plan (refer to **Figure 49: Mareetsane and Batho-Batho Development Plan**) for Mareetsane and Batho-Batho provides greater detail and accuracy from the spatial concept in the previous section.

The first structuring element (nodes and centres) is at a focused local or neighbourhood level and includes the following in Mareetsane and Batho-Batho:

- Node(s):
 - R375 and railway line intersection (Mareetsane gateway node).
- Tourism node:
 - Game farms (not accurate but refers to the wider areas tourism activities).
- Settlement edge:
 - The settlement edge aims to contain unsustainable development and encourage formalisation of everything within its border. This should additionally encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.

The second structuring element (movement and connectivity) includes the following in Mareetsane and Batho-Batho:

- Main route:
 - R375 (Mareetsane gateway corridor).
- Feeder routes:
 - Internal routes (Maipeng and Batho-Batho).
 - Road upgrading (tarring, maintenance, or improved grading).
- Railway network (Mareetsane).

The final and third structuring element (spatial areas) includes the following in Mareetsane and Batho-Batho:

- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- Mining areas (landcover).

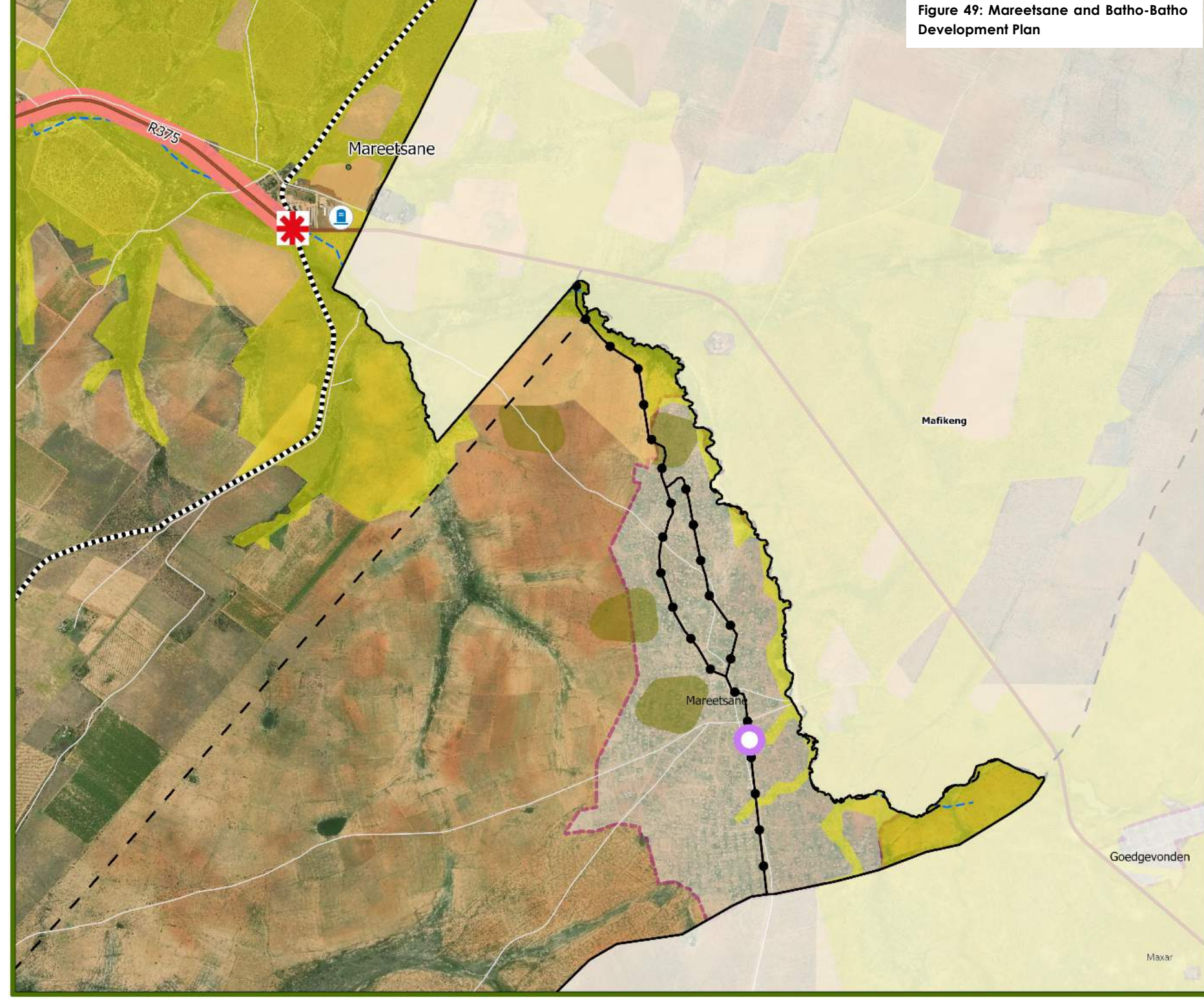
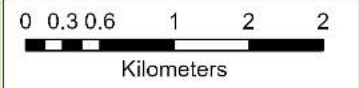
Figure 49: Mareetsane and Batho-Batho Development Plan



Mareetsane Development Plan

LEGEND

- Silos
- Nodes**
- Tourism Node
- Gateway Node
- Feeder Routes
- Secondary roads
- Main Roads
- Mareetsane Gateway corridor
- Rivers
- Railway
- Traditional Authorities
- Existing settlement area
- Municipal boundary
- Environmentally Sensitive area**
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2



5.5.2.4 Mokgobistad and Disaneng

The development plan (refer to **Figure 50: Mokgobistad and Disaneng Development Plan**) for Disaneng and Mokgobistad provides greater detail and accuracy from the spatial concept in the previous section.

The first structuring element (nodes and centres) is at a focused local or neighbourhood level and includes the following in Disaneng and Mokgobistad:

- Node(s):
 - D414 (Disaneng gateway node).
- Tourism node:
 - Disaneng dam.
- Tourism potential node:
 - Loporung (Molopo River).
- Port of Entry:
 - Mokgobistad (border node).
- Settlement edge:
 - The settlement edge aims to contain unsustainable development and encourage formalisation of everything within its border. This should additionally encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.

The second structuring element (movement and connectivity) includes the following in Disaneng and Mokgobistad:

- Priority linkage route:
 - D414 (border corridor);
 - Disaneng to N18; and
 - Maeyaeyane to Disaneng.
- Feeder routes:
 - Internal routes (Disaneng and Mokgobistad).
 - Road upgrading (tarring, maintenance, or improved grading).

The final and third structuring element (spatial areas) includes the following in Disaneng and Mokgobistad:

- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- Mining areas (landcover).
- River system and associated dams – used by local community for agricultural purposes.

The entirety of this framework area is designated as a priority enforcement area for the municipal land use scheme.

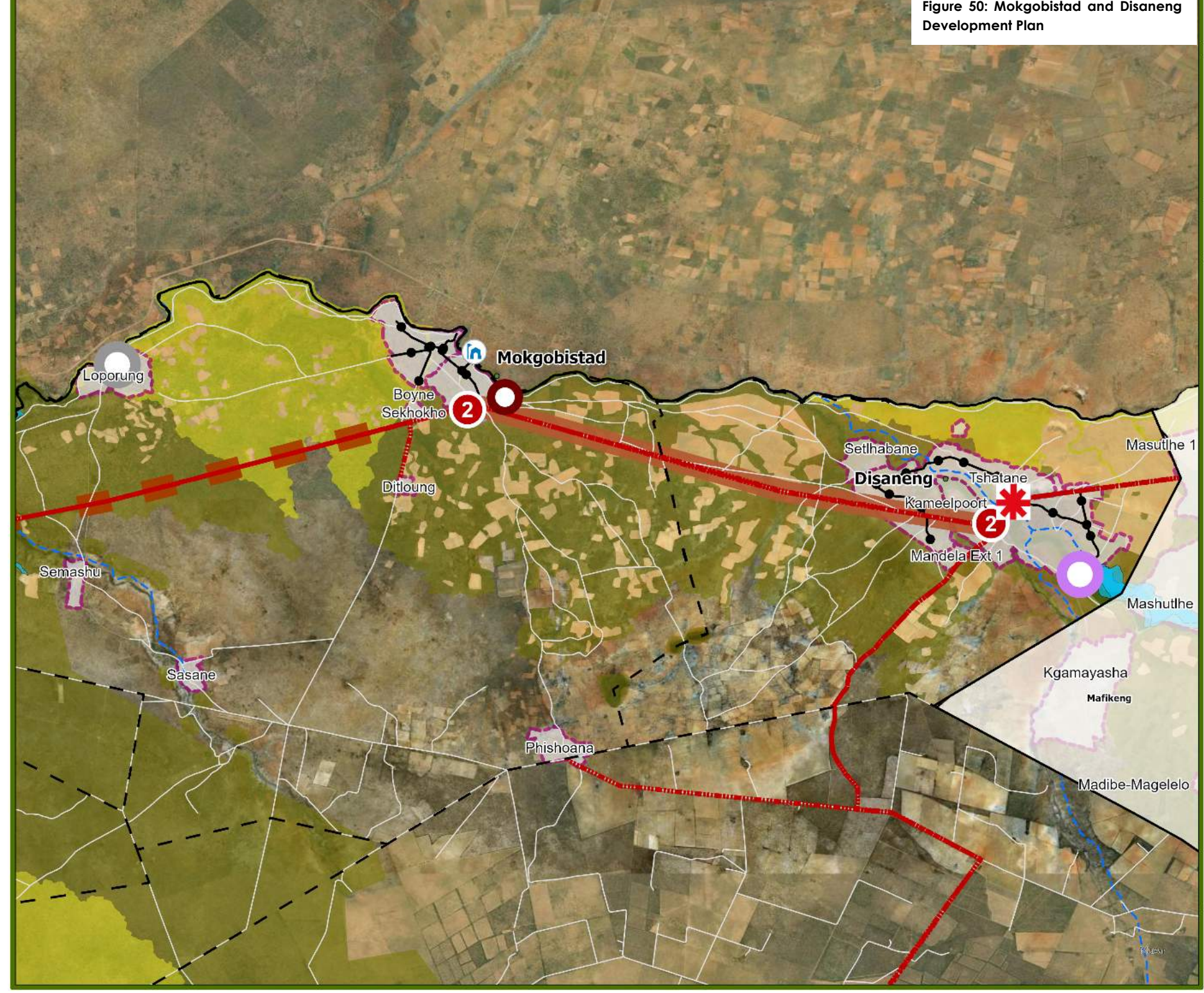
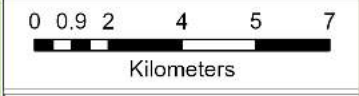
Figure 50: Mokgobistad and Disaneng Development Plan



Mokgobistad Development Plan

LEGEND

- Port of Entry
- Nodes**
 - Tourism Node
 - Gateway Node
 - Border Node
 - Potential Tourism
 - Priority formalisation zone 2
- Feeder Routes
- Secondary roads
- Rivers
- Border Corridor
- Extended Border Corridor
- Traditional Authorities
- Priority Linkage road
- Dams & water bodies
- Existing settlement area
- Municipal boundary
- Environmentally Sensitive area
- Critical Biodiversity Area 1
- Critical Biodiversity Area 2
- Ecological Support Area 1
- Ecological Support Area 2



5.5.2.5 Tshidilamolomo and Logageng

The development plan (refer to **Figure 51: Tshidilamolomo and Logageng Development Plan**) for Logageng and Tshidilamolomo provides greater detail and accuracy from the spatial concept in the previous section.

The first structuring element (nodes and centres) is at a focused local or neighbourhood level and includes the following in Tshidilamolomo and Logageng:

- Port of Entry:
 - Tshidilamolomo (border node – commercial and retail proposals).
- Settlement edge:
 - The settlement edge aims to contain unsustainable development and encourage formalisation of everything within its border. This should additionally encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.

The second structuring element (movement and connectivity) includes the following in Tshidilamolomo and Logageng:

- Main routes:
 - R375.
- Priority linkage route:
 - D414 (border corridor); and
 - Masamane to R375;
- Feeder routes:
 - Internal routes (Tshidilamolomo, Masamane, Mabule, and Dingateng).
 - Road upgrading (tarring, maintenance, or improved grading).

The final and third structuring element (spatial areas) includes the following in Tshidilamolomo and Logageng:

- Environmentally sensitive areas:
 - Very high;
 - High;
 - Medium; and
 - Low.
- Agriculture (low sensitivity areas).
- Mining areas (landcover).
- River system and associated dams – used by local community for agricultural purposes.

6 IMPLEMENTATION FRAMEWORK

6.1 Requirements

The implementation framework for the SDF provides the path, defined, and informed by the concepts, strategies and proposals in the previous sections, for implementation. The implementation framework includes supporting policies and guidelines, a capital investment framework and informs the sector plans and the IDP. These sections are included as part of SPLUMA and the DALRRD SDF guidelines (DALRRD, 2017).

SPLUMA states the following in terms of Section (21) (Republic of South Africa, 2013):

- (m) provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments;
- (n) determine a capital expenditure framework for the municipality's development programmes, depicted spatially;
- (o) determine the purpose, desired impact and structure of the land use management scheme to apply in that municipal area; and
- (p) include an implementation plan comprising of –
 - i) sectoral requirements, including budgets and resources for implementation;
 - ii) necessary amendments to a land use scheme;
 - iii) specification of institutional arrangements necessary for implementation;
 - iv) specification of implementation targets including dates and monitoring indicators; and
 - v) specification, where necessary, of any arrangements for partnerships in the implementation process.

6.2 Supporting policies

The supporting policies component of the implementation framework provide general policy guidelines that aid the implementation and support of the spatial proposals, made in the SDF (DALRRD, 2017). The policies are not intended to be a one-to-one approach in which one policy applies to one strategy only, rather, where applicable, a policy may apply to multiple strategies. This approach is derived from the development of several strategies which are then to be carried out by a policy approach (strategies inform the policy).

6.2.1 Settlement priority policy

Policy 1: Settlement priority
Policy 1: Settlement priority
Ratlou Local Municipality will evaluate land use applications in line with the prioritised areas set out in strategy 1 and 9.
Aim of the policy
The settlement priority policy aligns with the settlement structure and hierarchy strategy and aims to: <ul style="list-style-type: none"> ▪ Focus new developments (residential, commercial, industry etc.) in priority settlements. ▪ Formalisation of priority 1 and 2 settlements. ▪ Maintain and improve basic services and infrastructure in remaining settlements in the municipality. ▪ Strict approach (additional motivation and consideration) to greenfield developments in all areas across the municipality. ▪ New developments should be guided to only the settlements mentioned in both spatial Strategy 1: Settlement structure and hierarchy and Strategy 9: Catalytic areas.
Alignment to Strategy 1: Settlement structure and hierarchy and Strategy 9: Catalytic areas
Focus of municipal resources in main settlement and certain smaller settlements within the municipal area by following the settlement hierarchy. Utilisation of planning tools such as settlement edges, densification, and infill to develop sustainable, inclusive and conducive environments. These areas are also the primary catalytic spaces in which any catalytic development should occur.

6.2.2 Municipal conservation, protected and critical areas policy

Policy 2: Municipal conservation, protected, and critical areas
Policy 2: Municipal conservation, protected, and critical areas
Ratlou Local Municipality will not support NEMA applications that threaten conservation, protected and critical environmental areas.
Aim of the policy
The municipal conservation, protected, and critical biodiversity areas policy aligns with both the protected areas and areas of critical biodiversity areas strategies. This policy aims to: <ul style="list-style-type: none"> ▪ Limiting large scale, environmentally adverse developments from occurring within a reasonable radius of protected areas. Potential Land Use Scheme zone around protected areas or stricter development/application conditions. ▪ Carefully monitoring or subsistence farming incursions into critical and vulnerable biodiversity spaces. ▪ Strict assessment of land use applications in critical biodiversity areas. Expanded motivation and determinisation. ▪ Possible additional zoning for areas of critical biodiversity within the municipality. ▪ Due cognisance should be given to the districts biodiversity network when considering land use applications.
Alignment to Strategy 2: Protected areas and Strategy 3: Critical biodiversity areas
The development of protected and critical biodiversity areas within the municipal area (biodiversity networks as identified by the District). The protection and monitoring of natural systems that are vulnerable within the municipality. Finally, the balancing of natural systems and protecting them with socio-economic needs to the people of Ratlou and allowing the coexistence of protection and subsistence farming.

6.2.3 Local tourism policy

Policy 3: Local tourism
Policy 3: Local tourism
Ratlou Local Municipality will support private and public sector initiatives of a tourism nature in areas identified as such in the SDF.
Aim of the policy
The local tourism policy aligns with the tourism areas strategy. This policy should aim to build off the culturally and historically significant areas of the municipality. This policy aims to: <ul style="list-style-type: none"> ▪ Develop local tourism promotion campaigns for tourism areas such as the northern area of Ratlou along the border with Botswana and Kraaipan. Tourism campaign should reinforce the "off the beaten track" narrative. ▪ Tourism promotion should link with protected and conservation areas. Involvement of these stakeholders (tourism accommodation, recreation, activities etc.) should be prioritised. ▪ Investigations into alternative tourism attractions as mentioned in the strategy.
Alignment to Strategy 4: Tourism areas
The focus on tourism from the District is incorporated into the municipal strategy. The aim of the strategy is to build off the natural environment features and areas. Additionally, cultural, and historical areas are of focus within certain places in the municipal area.

6.2.4 Natural resource utilisation and management policy

Policy 4: Natural resource utilisation and management policy
Policy 4: Natural resources utilisation and management policy
Ratlou Local Municipality will support land use applications in line resource areas that aim to benefit local communities and aid in the protection of the environment.
Aim of the policy
The natural resource utilisation and management policy aligns with both agricultural focus areas and mining areas strategies. This policy aims to: <ul style="list-style-type: none"> ▪ Protection and improved management of agricultural activities both in commercial and subsistence fields. ▪ Subsistence agricultural farmers should be supported (educationally and technically) by all spheres of government. ▪ Municipal Land Use Management System (MLUMS) should have relaxed application procedures in agriculture related applications and processes where better and improved integration could occur. ▪ Due cognisance should be given to the Districts biodiversity network when considering land use applications involving both agriculture and mining. ▪ A Subsistence farming management and protection section should be incorporated into this policy.
Alignment to Strategy 5: Agricultural focus areas and Strategy 6: Mining areas
Resources linked to the natural environment such as agriculture and mining should be protected and conserved. Commercial and subsistence agriculture should be better integrated with support provided to subsistence agriculture through irrigation etc. Diversification of agricultural production of include livestock farming. Mining, primarily Kalgold, may expand only when environmentally suitable. Mining and resource extraction should take due cognisance of the environmental impact.

6.2.5 Rural revitalisation policy

Policy 5: Rural revitalisation policy

Policy 5: Rural revitalisation policy

Ratlou Local Municipality will support developments and land use applications that support rural communities through skills transfer.

Aim of the policy

The rural revitalisation policy aligns with the revitalisation or rural areas strategy. This policy aims to:

- Ensure the protection of rural communities and social fabrics during planning, infrastructure, and improvement processes.
- Unique rural economic activities should be encouraged, and prospective entrepreneurs should be guided and aided towards the correct departments/stakeholders (e.g. business support).
- In line with Policy 4: Natural resource utilisation and management, the support of subsistence agriculture should be encouraged with the engagement of communities, traditional leaders, community leaders and any applicable stakeholder. Technical and educational support should be provided to these communities when resource and financially possible.
- Subsistence farming should be addressed as a part of improving rural communities.

Alignment to Strategy 7: Revitalisation of rural areas

Rural areas within the municipality are an important component of the municipal fabric. Thus, the aim of the strategy is to protect the social arrangements and fabrics of rural communities. Support to rural communities by diversifying economic activities based on local context is an additional element of the strategy.

6.2.6 Service delivery and maintenance policy

Policy 6: Service delivery and maintenance policy

Policy 6: Service delivery and maintenance

Ratlou Local Municipality will support private and public sector initiatives that improve services in priority areas that improves reliability and sustainability.

Aim of the policy

The service delivery and maintenance policy align with strategy 8: service delivery and maintenance. This policy aims to:

- Bulk infrastructure (large scale and high value investments) should be focused on strategic locations such as Setlagole and Madibogo.
- Encourage the use of 'micro-grids' in settlements that are isolated and connection to existing service networks are difficult. These micro-grids should provide all basic services and allow for upgrading and expansion if needed.
- Service Delivery and Budget Implementation Plan (SDBIP) should be aligned or gradually incorporate these elements suggested.

Alignment to Strategy 8: Service delivery and maintenance

Service deliver and maintenance in terms of infrastructure such as water, sanitation, roads, and electricity networks should be maintained and expanded upon where growth and demand pressure are expected. Areas where less growth is expected should be maintained but limited large scale investment should be given. This is in line with Strategy 1: Settlement structure and hierarchy and Strategy 9: Catalytic areas.

6.2.7 Municipal movement and connectivity policy

Policy 7: Municipal movement and connectivity policy

Policy 7: Municipal movement and connectivity policy

Ratlou Local Municipality will support the improvement, upgrading and development of roads, rail and transportation in line with the SDF proposals.

Aim of the policy

The municipal movement and connectivity policy align with Strategy 10: Movement routes and connectivity. This policy aims to:

- The N18 (National mobility route – transfrontier corridor) that connect the main settlements internally and externally should be prioritised (district, province and national governments should be encouraged to utilise the focus areas assigned).
- This route should be used as the main connecting point to the north as stated in the strategy.
- Railway network should be improved through the involvement of Transnet and consider the expanded use of the network beyond just goods transportation.
- Connection and integration of isolated areas and settlements (e.g. northern area and settlements of Ratlou) should be encouraged. This will aid in supporting Policy 1: Settlement priority's, Policy 3: Local tourism and Policy 5: Rural revitalisation as it will aid in opening of areas with great potential for a variety of activities and improve these currently isolated communities.

Alignment to Strategy 10: Movement and connectivity routes

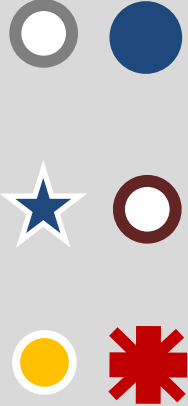


The strategy aims to improve the interconnections between main settlements, smaller settlements, and greater areas within the municipal area and externally to surrounding municipalities. It aims to exploit the already established national and regional network in the south of the municipality and integrate the northern areas of the municipality.





6.3 Supporting guidelines



Supporting guidelines refer to the processes that should be followed to implement and realise the spatial strategies. A set of guidelines has been developed to aid in implementing the spatial proposals in line with the MLUMS in the municipality. These guidelines aim to encourage alignment between the SDFs proposals and the MLUMS and additionally add any recommendations for amendments to the MLUMS (DALRRD, 2017).






In reference to the concept and municipal SDF and development plans, presented in the previous section, each of these elements are described in detail in how they could be utilised and implemented in terms of the Ratlou Land Use Scheme, 2016 (refer to **Table 21: Guidelines for implementation of SDF**).




TABLE 21: GUIDELINES FOR IMPLEMENTATION OF SDF

Tool/element	Description and implementation	Symbol
Nodes and centres		
Nodes (gateway, commercial, civic, cultural, and border)	<p>Description: A node (gateway, commercial, civic, and border) refers to an area in which a higher concentration of mixed-use land uses, densities and building types should be concentrated. This should also feature improved transport access due to its location on important movement routes.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Allowing multiple compatible land use types within the designated nodal area. Applications of compatible uses should be considered as preferential. ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Business. ▫ Institutional. ▫ Commonage. ▫ Residential (medium and high density). ▫ Authority. ▫ Public open space. 	
Tourism node and potential tourism node	<p>Description: A tourism node refers to an area where tourism and related activities are existing or are encouraged to develop. This node type is generally located outside or on the periphery of settlements and is largely linked natural characteristics and places of cultural/ historic significance.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Tourism areas of a cultural significance are generally located on municipal zoned land. ▪ Private tourism areas are generally located on agricultural land (possible consideration of adding a sub-category of zoning or land use to differentiate game reserves, protected areas etc.). ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Conservation. ▫ Resort (accommodation – bed and breakfast, hotel etc.) ▫ Business (supporting zoning to previous two zonings). 	
Mining node	<p>Description: A mining node (e.g. Kalgold) is an area where mining and industrial activities occur. These nodes should be considered as strict land use enforcement areas due to the environmental and human risk posed. These spaces be better regulated by placing a buffer around the applicable zonings.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Mining nodes should allow mining and related activities to occur close and near to the main mining or quarrying activity. However, incompatible land uses (educational, public open space etc.) should be limited near to this land use. ▪ Upon closure of the operations and activities (close to settlements) in these nodes the zoning should be amended to 'transformation zoning' which implies rehabilitation and restoration are required. This will allow alternative developments and land uses post transformation. ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Mining and quarrying. ▫ Industrial. ▫ Transportation. ▫ Agriculture (consideration should be given due to the general rural nature of mining within the municipality). 	

<p>Priority 1 (one)</p>	<p>Description: A priority 1 (one) point refers to its priority in terms of settlement formalisation and upgrading. A priority one should be formalised first (after Setlagole and Madibogo). Works within the settlement hierarchy.</p> <p>MLUMS Guidelines:</p> <ul style="list-style-type: none"> ▪ Applications within these points, regarding formalisation in all forms, should be prioritised for the improvement and wellbeing of the settlement. 	
<p>Priority 2 (two)</p>	<p>Description: A priority 2 (two) point refers to its priority in terms of settlement formalisation and upgrading. A priority two should be formalised after a priority one. Works within the settlement hierarchy.</p> <p>MLUMS Guidelines:</p> <ul style="list-style-type: none"> ▪ Applications within these points, regarding formalisation in all forms, should be prioritised for the improvement and wellbeing of the settlement. 	
<p>Movement and connectivity</p>		
<p>National mobility route (transfrontier corridor)</p>	<p>Description: This movement route and corridor category refers to routes that are of a national significance for private, public, goods and services movement. Along these routes, activities should generally utilise the improved exposure provided but not have direct access onto the route.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Limiting activities along the routes that are not suitable such as residential land uses having direct access onto the route. ▪ Encourage land uses that will benefit from the logistics access such as business, commercial and industrial land uses. ▪ This element should be considered as a public road (any road or street for public use or any land intended for such purposes). ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Business. ▫ Industrial. ▫ Commonage. 	
<p>Regional mobility route (Setlagole civic corridor)</p>	<p>Description: This movement route and corridor category refers to routes that are of a regional and municipal significance for private, public, goods and services movement. Along these routes, a wider variety and number activities should be encouraged and can benefit from both the exposure and access.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Allowing a wider range of activities along the routes. Allowing higher density residential land uses but still considering lower density, small scale residential land uses. ▪ Encourage land uses that will benefit from the logistics access such as business, commercial and industrial land uses. ▪ Assessment of the compatibility of land uses along these routes should be thorough. ▪ This element should be considered as a public road (any road or street for public use or any land intended for such purposes). ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Business. ▫ Industrial. ▫ Residential (low to high density). ▫ Commonage. ▫ Authority. 	

<p>Main route (Mareetsane corridor and Kraaipan cultural corridor)</p>	<p>Description: Main routes and corridors (where indicated) refer to movement routes that are of importance to a main settlement or smaller settlement. These routes should allow the majority if not all of zonings contained in the MLUMS to occur along them. These routes provide improved access with less movement.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Allowing a very large range of activities (land uses) along the routes. ▪ Encourage land uses that will benefit from the excellent access as well as movement such as business, industrial (depending on proximity to incompatible land uses), residential, educational, public open spaces etc. ▪ This element should be considered as a public road (any road or street for public use or any land intended for such purposes). ▪ Potential zoning: <ul style="list-style-type: none"> ▫ Business. ▫ Industrial (dependent on surrounding land uses). ▫ Commonage. ▫ Residential (low to medium density). ▫ Public open space. ▫ Institutional. 	
<p>Feeder route</p>	<p>Description: This category of movement route is important to areas or neighbourhoods within a settlement and connects with minor routes. These routes should encourage excellent access with least fast movement potential. These routes are aimed at providing the best possible access and thus should not see, if possible, any land uses besides residential along them.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Exclusively focus on residential and commonage land uses along and near to this movement route. ▪ Limited other incompatible land uses along and near to the routes. ▪ This element should be considered as a public road (any road or street for public use or any land intended for such purposes). ▪ Proposed zoning: <ul style="list-style-type: none"> ▫ Residential (low density). ▫ Commonage (low intensity subsistence farming). 	

<p>Priority linkage routes (border corridor)</p>	<p>Description: This movement route is largely aimed at creating or improving a movement route. These are intended to become a public road.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Consideration of existing land uses and zoning around where the proposed routes lie. ▪ These routes are generally in rural areas and thus should take cognisance of rural land uses (agriculture, mining and quarrying, commonage etc.). 	
<p>Railway</p>	<p>Description: Railway routes and stations generally transport/service goods related to specific industries. This movement route is not aimed at the public for transportation purposes and thus needs to be considered when dealing with land uses near to railway stops/stations.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Consideration of land uses and activities that utilise the service such as industry and commercial land uses. ▪ Consideration of railway design norms and standards when dealing with land use applications near or next to railway lines. ▪ Proposed zoning: <ul style="list-style-type: none"> ▫ Industrial. ▫ Transportation. 	
<p>Activity route</p>	<p>Description: Activity routes are an overlay that can lie over any of the before mentioned movement routes (except railway). This category aims to encourage high intensity mixed use developments along and near to the route.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ Relaxed consideration of mixed-use developments or compatible developments along these routes. ▪ Allow for a variety of densities to occur along the routes. ▪ Proposed zoning: <ul style="list-style-type: none"> ▫ Residential (low to high density). ▫ Business (low to high intensity). ▫ Authority. ▫ Resort. ▫ Transportation. ▫ Public/private open spaces. 	
<p>Spatial areas</p>		
<p>Settlement edge</p>	<p>Description: The settlement edge aims to guide development within an area that is deemed to be suitable for a settlement. It is utilised to create a sustainable and efficiently working settlement without limiting land use rights. It additionally aims to contain unsustainable development and encourage formalisation of everything within its border. This should encourage the consolidation of development within through consultation with communities, traditional and municipal authorities.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ General MLUMS procedures should be followed within and out of the settlement edge. ▪ However, land use applications out of the boundary should require additional motivation due to the deviation from the SDF. 	
<p>In situ upgrading</p>	<p>Description: In situ upgrading refers to the formalisation of informal settlements on site. These areas are designated and recognised as informal and thus should be formalised. The formalisation process will require additional investigation through the National Upgrading Support Programme (NUSP) and its Upgrading Informal Settlement Programme (UISP).</p> <p>Guidelines:</p> <ul style="list-style-type: none"> ▪ The UISP requires municipalities to apply to the Provincial government for funding. Information required for informal 	

	<p>settlements in the municipality should be included in the IDP and Housing Plan.</p> <ul style="list-style-type: none"> ▪ Potential grants for this include, not limited to, (depending on the informal settlement categorisation – refer to Housing Code): <ul style="list-style-type: none"> ▫ UISP. ▫ Human Settlements Development Grant (USDG). ▪ Additional zoning for informal areas could be considered in which the National Building Regulations and Building Standards (NBRBS) are suspended. 	
Infill development	<p>Description: Infill development refers to the process by which a development is aimed at an open erf or stand within an already developed area with the purpose of utilising already available services.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ In fill should be a key consideration for approval of applications given its benefit to improving urban structures. ▪ Infill developments should receive preference over greenfields developments. ▪ Applicable to any time of land use or zoning. 	
Settlement expansion	<p>Description: Settlement expansion refers to the development of new residential areas or settlements. This is generally a greenfield type development and can be private or public sector driven. Public sector development could form part of several programmes such as the Integrated Residential Development Programme (IRDP).</p> <p>MLUMS Guidelines:</p> <ul style="list-style-type: none"> ▪ Strict and comprehensive approach to the approval of greenfields developments due to the large resource allocation required. 	
Unproclaimed erven	<p>Description: Unproclaimed erven are areas that are not cadastre registered, however, this does not infer that they are informal in nature.</p> <p>MLUMS guidelines:</p> <ul style="list-style-type: none"> ▪ These areas should be provided progressive tenure recognition towards full tenure via administrative tenure etc. 	

Engineering services (no top structure) - 6 months				R 115 000 000			65	50									
Dwelling units developed (top structure included) - 6 months				to be determined			Discretionary										
Settlement expansion	65	Kraaipan	6				65 ha										
Submission into the SPLUMA application process (not yet surveyed) - 12 months				R 1 022 500			65										
Approval by Surveyor General - 4 months				R 862 500				65									
Township proclaimed (township establishment completed) - 8 months				R 902 500				65									
Engineering services (no top structure) - 6 months				R 65 000 000					65								
Dwelling units developed (top structure included) - 6 months				to be determined					Discretionary								
Settlement expansion	85	Madibogo	7						85 ha								
Phase 1	45								X1	X1	X1						
Phase 2	40								X2		X2	X2					
Submission into the SPLUMA application process (not yet surveyed) - 12 months				R 1 272 500					85								
Approval by Surveyor General - 4 months				R 1 112 500						45	40						
Township proclaimed (township establishment completed) - 8 months				R 1 152 500						45	40						
Engineering services (no top structure) - 6 months				R 85 000 000							45	40					
Dwelling units developed (top structure included) - 6 months				to be determined							Discretionary						
Settlement expansion	110	Setlagole	8								110 ha						
Phase 1	60									X1	X1	X1					
Phase 2	50									X2		X2	X2				
Submission into the SPLUMA application process (not yet surveyed) - 12 months				R 1 585 000						110							
Approval by Surveyor General - 4 months				R 1 425 000							60	50					
Township proclaimed (township establishment completed) - 8 months				R 1 465 000							60	50					
Engineering services (no top structure) - 6 months				R 110 000 000								60	50				
Dwelling units developed (top structure included) - 6 months				to be determined							Discretionary						

The table below (**Table 23: Ratlou Settlement Expansion Summary**) illustrates the number of hectares per year for each process and corresponds with the table above.

TABLE 23: RATLOU SETTLEMENT EXPANSION SUMMARY													
Process	2020	2021	2022	2023	2024	2025	2025 total	2026	2027	2028	2029	2030	2030 total
Submission into the SPLUMA application process (not yet surveyed) - 12 months	115	95	0	65	0	85	360	110	0	0	0	0	110
Approval by Surveyor General - 4 months	0	65	100	45	65	0	275	45	100	50	0	0	195
Township proclaimed (township establishment completed) - 8 months	0	65	100	45	65	0	275	45	100	50	0	0	195
engineering services (no top structure) - 6 months	0	0	65	100	45	65	275	0	45	100	50	0	195
Dwelling units developed (top structure included) - 6 months	Discretionary												

The table below (**Table 24: Ratlou Implementation Framework (Additional Social Facilities)**) illustrates the social facilities required calculated using additional population. The "X" donates a single unit corresponding with the year it needs to be phased in. A numerical value before the X denotes the multiple of that unit in that year to keep up with the demand. The provisional criteria are:

C = Compulsory (basic essential service).

D = Discretionary (non-essential provision based on under supply/unserved need, distance or other factors including funding availability).

R = Recommended (valuable services that are unfunded or non-essential).

TABLE 24: RATLOU IMPLEMENTATION FRAMEWORK (ADDITIONAL SOCIAL FACILITIES)														
Project	Provision Criteria	Quantity (total by 2030)	Responsibility		Phasing									
			Planning	Implementation	2020 to 2025					2025 to 2030				
					2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Local Library	C	1	Municipality and Provincial Department of Arts, Culture and Tourism	Municipality and Provincial Department of Arts, Culture and Tourism								X		
Sports Fields	D	14	Municipality	Municipality	Discretionary									
Park Space	D	14	Municipality	Municipality	Discretionary									
Secondary School	C	1	Private and Provincial Department of Higher Education	Private and Provincial Department of Higher Education			X							
Primary School	C	3	Private and Provincial Department of Higher Education	Private and Provincial Department of Higher Education		X		X					X	
High income Creche/early Childhood Centre	C	5	Private	Private		X	X		X			X		X
Low income Creche/early Childhood development centre	C	6	Private and Provincial Department of Higher Education	Private and Provincial Department of Higher Education		X	X	X	X		X		X	
Home Affairs - Permanent Service point	C	1	National Department of Home Affairs	Provincial Department of Public Works										X
Home Affairs - Thusong Centre	C	1	National Department of Home Affairs	Provincial Department of Public Works									X	
Religious Centre	D	5	Private or NGO	Private or NGO	Discretionary									

Apart from the settlement expansion and the additional social facilities required, the following key anchor projects must be budgeted for in the IDP and implemented within the next 5 to 10 years:

- Licensing & Development of Thutlwane Landfill Site.
- Ratlou Regional Bulk Water Supply (Thutlwane, Setlagole, Madibogo).
- Setlagole Commercial Hub Development (Upgrading of existing Setlagole Complex on Setlagole 640 IO and private sector investment (Portion 2 of the farm Setlagole South 583 IO):
 - Land Tenure Upgrade.
 - Setlagole and Madibogo.
 - Disaneng.
 - Logageng.
 - Makgobistad.
- Commercial Hub:
 - Tshidilamolomo.
- Development of Setlhwatlwe Sacred Heritage Site Access Road.
- Logageng Game Lodge.
- New settlement – Maretsane settlement development along the R375 (on the farm Stoneham 507 IO).
- Finalisation of land claim.
- Setlagole Agro – Processing Industrial expansion (Newnut + Roba nut factory) along the N18.
- Development of Setlagole Government Node (Bulk & Reticulation).
- Upgrading of Mabule & Dingateng Internal Roads.
- Upgrade of Setlagole-Logageng Link Road.
- Development of Disaneng Multi-purpose Centre.
- Development of Taxi Ranks: Mareetsane, Tshidilamolomo, Kraaipan and Disaneng.

6.5 Key sectoral notions of the SDF

Informing the sector plans refers to the way in which the SDF spatial proposals inform the priorities, performance indicators and targets of a multitude of relevant sector plans including the local municipality, district, province and national spheres of government.

The various sectors, departments and entities which are impacted upon by, and have an impact on, this SDF are presented in **Table 25: Key Sectoral Notions (National and Provincial)** and **TABLE 26: KEY SECTORAL NOTIONS (LOCAL – DISTRICT And MUNICIPAL)**. The local sectoral notions table is based on the current powers and functions of the District and the Local municipality. Each of these powers and functions have been rated in accordance with their relevance to this SDF. A rating of 'High' implies that it is in line with multiple strategies or proposals. A 'medium' is in line with some of the strategies and proposals. Finally, 'low' implies that it does not fall in line with any of strategy or proposal or is generally not a spatially important component. These are then discussed in brief regarding their alignment and priority to the SDF with reference to specific places (main settlements, smaller settlements, spaces etc.) where applicable.

TABLE 25: KEY SECTORAL NOTIONS (NATIONAL and PROVINCIAL)			
Sector	Sphere	Department /entity	Key aspects of this SDF
Agriculture	National	Department of Agriculture, Land Reform and Rural Development.	<ul style="list-style-type: none"> ▪ Coordination of agricultural support to commercial and subsistence farmers and communities. ▪ Support of both groups of farmers through the Agri park in Ditsobotla and FPSUs.
		Department of Environment, Forestry and Fisheries.	<ul style="list-style-type: none"> ▪ Ensuring the implementation and compliance of the proposed conservation, protected and critical biodiversity areas in the municipality. ▪ Legislative enforcement of national legislation in the before mentioned spaces. ▪ Monitoring of the impact that agricultural activities, current and proposed, will have on the network.
		Department of Traditional Affairs	<ul style="list-style-type: none"> ▪ Coordination, facilitation and informing of traditional authorities on the SDF proposals that will have an impact on these institutions and spaces, such as: <ul style="list-style-type: none"> ▫ Commercial and subsistence agriculture linkages. ▫ Planning interventions in traditional settlements (settlement edge, activity streets, activity nodes etc.).
	Provincial	Department of Agriculture and Rural Development.	<ul style="list-style-type: none"> ▪ Coordination with the national department of support of commercial and subsistence farmers and communities. ▪ Capacity building around agriculture and improved service delivery to commercial and subsistence agriculture across the municipality. ▪ Involvement of private sector groups such as the NWK.
		Department of Cooperative Governance, Human Settlements and Traditional Affairs.	<ul style="list-style-type: none"> ▪ Coordination and facilitation with the national department on traditional authority institutions and the informing of these groups on the SDFs agricultural elements. ▪ Provide access to traditional authorities in the municipality to aid the national department in informing traditional authorities on the agricultural approaches contained in the SDF.
		Department of Economic Development, Environment, Conservation and Tourism.	<ul style="list-style-type: none"> ▪ Consideration of the environmental impact that agriculture has on the conservation, protected and critical biodiversity spaces in the municipality and wider district. ▪ Focus on impact on subsistence agricultural practices on these spaces.

Tourism	National	Department of Tourism	<ul style="list-style-type: none"> ▪ Ensure the alignment of tourism strategies and proposals within the municipality (tourism nodes, areas, and settlements) to that of the National Tourism Sector Strategy (NTSS).
		Department of Sports, Arts and Culture.	<ul style="list-style-type: none"> ▪ Ensuring the development of local arts and culture within the municipality. ▪ Promoting local community participation in the tourism nodes (act a supporting agent to provincial and local departments).
	Provincial	Department of Arts, Culture, Sports and Recreation.	<ul style="list-style-type: none"> ▪ Empowering local communities in their respective cultures and values through financial and administrative support to tourism nodes and areas: <ul style="list-style-type: none"> ▫ Kraaipan; ▫ Disaneng; and ▫ Proposed northern tourism nodes in settlements along the border.
		Department of Economic Development, Environment, Conservation and Tourism.	<ul style="list-style-type: none"> ▪ Supporting the business development in tourism nodes (cultural and natural heritage promotion) and affected communities such as: <ul style="list-style-type: none"> ▫ Kraaipan; ▫ Disaneng; and ▫ Proposed northern tourism nodes – e.g. Mokgobistad. ▪ Alignment of the tourism nodes and areas and the conservation, protected, and critical biodiversity areas to prevent adverse damages caused by tourism related activities.
		North West Parks Board.	<ul style="list-style-type: none"> ▪ Aiding in the development of a tourism-based economy by ensuring the establishment, development and management of the northern area of the municipality. ▪ Skills development in communities near to vulnerable natural environments and tourism nodes and areas.
		North West Tourism Board.	<ul style="list-style-type: none"> ▪ Support local tourism strategies and campaigns (tourism nodes) by providing training and skills transfer, facilitation tourism investment and aid new entrants into the sector. ▪ Tourism support should be provided to tourism nodes such as: <ul style="list-style-type: none"> ▫ Kraaipan; ▫ Disaneng; and ▫ Proposed northern tourism nodes in settlements along the border.
Economy	National	Department of Small Business Development.	<ul style="list-style-type: none"> ▪ Support local businesses, particularly in main settlements and rural settlements that have potential (tourism etc.). ▪ Support and encourage small business to locate in main settlements identified in the SDF, such as: <ul style="list-style-type: none"> ▫ Setlagole and Madibogo. ▫ Disaneng and Mokgobistad.
		Provincial	Department of Economic Development, Environment, Conservation and Tourism.
	North West Development Corporation SOC Ltd.	<ul style="list-style-type: none"> ▪ Provide finance, coordination, promotion and support to local businesses across the municipality. ▪ Promote and encourage business to locate and utilise the activity spaces designated in the SDF. 	
Infrastructure	National	Department of Public Works and Infrastructure.	<ul style="list-style-type: none"> ▪ Expansion of the Expanded Public Works Programme (EPWP) to include infrastructure improvement projects such as: <ul style="list-style-type: none"> ▫ National mobility routes (N18 – transfrontier corridor).

		Department of Transport.	<ul style="list-style-type: none"> ▪ Incorporate the national, regional and priority linkage routes into policy frameworks.
		Department of Water and Sanitation.	<ul style="list-style-type: none"> ▪ Ensure the incorporation of the priority structure of infrastructure provision in the municipality according to the SDF: <ul style="list-style-type: none"> ▫ First order; ▫ Second order; ▫ Third order; and ▫ Fourth order.
		Department of Mineral Resources and Energy.	<ul style="list-style-type: none"> ▪ Inclusion of energy proposals such as 'micro-grids' are included into the policies and proposals of the department. ▪ Current mining areas such as the mining nodes of the municipality are included into policy: <ul style="list-style-type: none"> ▫ Kalgold
		SANRAL	<ul style="list-style-type: none"> ▪ National mobility routes (all part of SANRALs network) should be taken cognisance of given certain proposals in the SDF such as: <ul style="list-style-type: none"> ▫ Lower order movement routes connecting onto the N18 for example. ▫ Adjacent land uses and proposals (conservation, protected and biodiversity areas).
		ESKOM	<ul style="list-style-type: none"> ▪ Provision of bulk electrical services in areas of ESKOM provision requirements that are strategic and catalytic, such as: <ul style="list-style-type: none"> ▫ Setlagole and Madibogo ▪ Maintain existing networks and systems as needed with limited capacity expansion. Guiding expansion towards key strategic locations. ▪ Supporting of the implementation of micro-grids in rural settlements.
		TRANSNET	<ul style="list-style-type: none"> ▪ Supporting to maintain and improve the rail network in the municipality and anticipate the required improvements needed if other strategies and proposals of the SDF are met. ▪ Re-establishing disused railway lines to open currently isolated sections of the municipality.
	Provincial	Department of Public Works and Roads.	<ul style="list-style-type: none"> ▪ Ensure the incorporation of the proposed regional mobility routes into the provincial roads plan. ▪ Utilising the EPWP to improve the movement network: <ul style="list-style-type: none"> ▫ Regional mobility routes (R376). ▫ Priority linkage routes (R375 and northern connection).
		North West Transport Investments SOC Ltd.	<ul style="list-style-type: none"> ▪ Recognition of the proposed movement and connectivity networks as seen in the SDF. Utilise them for any proposed transportation investments given their linkages to important settlements and centres in the municipality and beyond.
Social	National	Department of Traditional Affairs.	<ul style="list-style-type: none"> ▪ Coordination, facilitation and informing of traditional authorities on the social proposals that will have an impact on these institutions and spaces, such as: <ul style="list-style-type: none"> ▫ Social service facilities provision. ▫ Expanded promotion of culture, heritage and social cohesion in the process of rural revitalisation and rural development as proposed in the SDF.
		Department of Basic Education.	<ul style="list-style-type: none"> ▪ Inclusion of the social facilities (educational facilities) allocations required in policy and planning. Allocations of

			necessary resources to the North West Provincial Department of Education.
		Department of Health.	<ul style="list-style-type: none"> ▪ Inclusion of the social facilities (health and medical facilities) allocations required in policy and planning. Allocations of necessary resources to the North West Provincial Department of Health.
		Department of Employment and Labour.	<ul style="list-style-type: none"> ▪ Incorporation of SDF proposals (when applicable) into policy as possible approaches to addressing social concerns i.e. unemployment, poverty, inequality etc.
		Department of Social Development.	<ul style="list-style-type: none"> ▪ Incorporation of the communities and approaches required to meet in departmental planning and strategies. Allocation of necessary resources to the North West Provincial Department of Social Development.
	Provincial	Department of Education.	<ul style="list-style-type: none"> ▪ Alignment of the social facilities required (educational facilities in main settlements and smaller settlements) with policy and budgetary approaches.
		Department of Health.	<ul style="list-style-type: none"> ▪ Alignment of the social facilities required (health facilities in main settlements and smaller settlements) with policy and budgetary approaches.
		Department of Social Development.	<ul style="list-style-type: none"> ▪ Inclusion of poor, vulnerable and excluded communities into programmes and projects development by other departments and entities in implementing the SDF proposals and strategies. Projects such as: <ul style="list-style-type: none"> ▫ Small business development along activity routes. ▫ Movement and connectivity route improvement plans.
Human settlements	National	Department of Human Settlements.	<ul style="list-style-type: none"> ▪ Incorporation of human settlements related proposals into planning and budgetary allocations. ▪ Primary locations of all human settlements related developments are: <ul style="list-style-type: none"> ▫ Setlagole and Madibogo; and ▫ Kraaipan.
	Provincial	Department of Cooperative Governance, Human Settlements and Traditional Affairs.	<ul style="list-style-type: none"> ▪ Inclusion of human settlements proposals into future years budgets. Spending includes: <ul style="list-style-type: none"> ▫ In-situ upgrading. ▫ Settlement expansion. ▫ These proposals are based exclusively in the main settlements of the municipality as per the SDFs strategies and proposals. ▪ Where budgets are limited, and additional funding support is required grants from the national Department of Human Settlements may be secured upon the municipality submitting business plans for funding.

TABLE 26: KEY SECTORAL NOTIONS (LOCAL – DISTRICT and MUNICIPAL)

Sector	Function	NMMDM	Ratlou	SDF priority			Alignment and priority
				High	Medium	Low	
Water and Sanitation Services		Yes	Yes	-			-
	Municipality is water services authority.	Yes	No	Medium			Water provision forms part of basic services provision and is an important component of Strategy 8.
	Municipality is water services provider in main towns.	No	No	High			Provision to main settlements is in line with Strategy 1, 8 and 9. CBD (Setlagole – N18/ R507 intersection) and places of high density in settlements are of priority.
	Municipality is water services provider in villages (performed by Water Board).	Yes	No	High			Provision to villages (rural areas) is in line with Strategy 1, 7 and 8. Central areas in settlements and villages in rural spaces – maintenance and improved service where needed.
Electricity and Gas Reticulation		No	Yes	-			-
	Electricity	No	No	High			Electricity provision (reticulation) is in line with Strategy 8. Main settlements and smaller settlements for upgrading and maintenance in remaining settlements.
	Street lighting	No	Yes	Medium			Areas with high levels of activity - activity streets, nodes, and movement and connectivity routes.
Municipal Transport		Yes	Yes	-			-
	Municipal public transport	Yes	No	Medium			This provision falls in line with Strategy 10 and may utilise the proposed movement and connectivity network. Taxi ranks and other forms are transport in central point's such as intersections, commercial areas and regional mobility routes.
	Municipal airports	No	No	Low			No airport present within the municipality.
Waste Management		Yes	Yes	-			-
	Refuse removal	Yes	Yes	High			Provision of refuse removal is in line with strategy 8. Places with high activity such as commercial centres, shopping centres, activity routes, main routes and public spaces should be prioritised.
	Refuse dumps/solid waste disposal	Yes	Yes	Medium			Provision of refuse dumps and solid waste removal aid is protecting certain areas from

					illegal dumping (Strategy 2 and3) and is in line with Strategy 8.
	Cleansing	No	Yes	Medium	Prioritisation of cleansing along regional mobility routes and main routes of main settlements, tourism nodes and activity nodes. Aids in Strategy 4 and 9.
Roads and Storm water Systems		Yes	Yes	-	-
	Municipal roads	Yes	Yes	High	Municipal roads are in line with Strategy 1, 8, 9 and 10. Main and feeder routes within main settlements should be prioritised.
	Storm water systems in built-up areas	Yes	Yes	High	Provision of storm water systems in built-up areas is in line with Strategy 1, 8 and 9. Priority should be given to settlements and areas close to flooding prone areas (refer to biophysical maps).
	Municipality performs the 'District' roads function	Yes	No	High	District roads provision is in line with Strategy 1, 8, 9 and 10. It additionally aids in connecting the municipality to the wider region and priority should be given to the main routes.
Community and Social Services		No	Yes	-	-
	Local amenities: Regulation and facilitation.	No	Yes	Low	MLUMS.
	Local amenities: Service provision.	No	Yes	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
	Local sports facilities: Regulation and facilitation.	No	Yes	Low	MLUMS.
	Local sports facilities: Service provision.	No	Yes	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
	Municipal parks and recreation: Regulation and facilitation.	No	Yes	Low	MLUMS.

Municipal parks and recreation: Service provision.	No	Yes	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
Public places: Regulation and facilitation.	No	Yes	Low	MLUMS.
Public places: Service provision.	No	Yes	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
Childcare facilities: Regulation and facilitation.	No	No	Low	MLUMS.
Childcare facilities: Service provision.	No	No	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
Cemeteries, funeral parlours and crematoria: Regulation and facilitation.	No	No	Low	MLUMS.
Cemeteries, funeral parlours and crematoria: Service provision.	No	No	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller settlements where growth and subsequent demand will occur.
Museums: Regulation and facilitation.	No	No	Low	MLUMS.
Museums: Service provision.	No	Yes	Medium	In line with the social services provision discussed in the land use budget and previous component of the implementation framework. Provision should occur in main settlements and smaller

					settlements where growth and subsequent demand will occur.
Planning and Development		Yes	Yes	-	-
	Municipal planning.	Yes	Yes	High	In line with the implementation of the IDP and MLUMS. Municipal planning is the enabler and implementor of the SDF.
	Building regulations.	No	No	Low	MLUMS.
Emergency Services		Yes	Yes	-	-
	Firefighting: Authority.	Yes	No	Medium	Provision of a well-equipped service that is able support the local municipality adequately.
	Firefighting service provision.	No	No	High	Priority should be given to fire prone areas in settlements (informal settlements) and in rural spaces such a protected areas, agricultural land and vulnerable ecosystems.
Municipal Health		Yes	Yes	-	-
	Municipal health: Regulation and facilitation.	Yes	No	Low	Not applicable to the SDF.
	Licensing and control of undertakings that sell food to the public: Regulation.	No	No	Low	MLUMS.
	Licensing and control of undertakings that sell food to the public: Service provision.	No	No	Low	For consideration.
	Noise pollution: Regulation and facilitation.	No	No	Low	MLUMS.
	Noise pollution: Service provision.	No	No	Low	Increased noise monitoring should be considered around land uses that produce excessive noise pollution in settlements.
	Pounds: Regulation and facilitation.	No	No	Low	MLUMS.
	Pounds: Service provision.	No	No	Low	For consideration.
	Accommodation, care and burial of animals: Regulation and facilitation.	No	No	Low	MLUMS.
	Accommodation, care and burial of animals: Service provision.	No	No	Low	For consideration.

	Licensing of dogs: Regulation and facilitation.	No	No	Low	MLUMS.
	Licensing of dogs: Service provision.	No	No	Low	For consideration.
Environmental Management		Yes	Yes	-	-
	Air pollution.	Yes	No	High	Important for the implementation of improving environmental conditions across the municipality. In line with Strategy 2, 3 and 6. Priority should be given to the monitoring of air pollution in settlements and rural areas.
Economic Development		Yes	Yes	-	-
	Local tourism: Regulation and facilitation.	Yes	Yes	Low	MLUMS.
	Local tourism: Service provision.	No	Yes	High	Provision of local tourism aids in implementing Strategy 4 with regards to tourism nodes and strategies.
	Markets: Regulation and facilitation.	No	Yes	Low	MLUMS.
	Markets: Service provision.	No	Yes	Medium	Provision of markets aids in the development of activity nodes and streets in the main settlements and smaller settlements shown in the SDF.
	Abattoirs: Regulation and facilitation.	No	No	Low	MLUMS.
	Abattoirs: Service provision.	No	No	Medium	Supports the agricultural focus of Strategy 5 of the SDF.
	Trading regulations: Regulation and facilitation	No	Yes	Low	MLUMS and municipal by-laws.
	Trading regulations: Service provision.	No	Yes	Low	MLUMS and municipal by-laws.
	Street trading: Regulation and facilitation.	No	Yes	Low	MLUMS.
	Street trading: Service provision.	No	No	High	Provision of street trading aids in the development of activity nodes and streets.
	Billboards and the display of advertisements in public places: Regulation and facilitation.	No	No	Low	MLUMS.

	Billboards and the display of advertisements in public places: Service provision.	No	No	Low	MLUMS.
	Fences and fences: Regulation and facilitation.	No	No	Low	MLUMS.
	Fences and fences: Service provision.	No	No	Low	MLUMS.
	Control of undertakings that sell liquor to the public: Regulation and facilitation.	No	No	Low	Municipal by-law.
	Control of undertakings that sell liquor to the public: Service provision.	No	No	Low	Municipal by-law.
	Local economic development: Regulation and facilitation.	Yes	Yes	High	LED facilitation can form part of multiple proposals in the SDF such as activity nodes, tourism nodes, subsistence agriculture etc.
	Local economic development: Service provision.	No	No	High	LED provision can form part of the implementation of the proposals in the SDF such as activity nodes, tourism nodes, subsistence agriculture etc.
	Municipal Public Works: Any supporting infrastructure or services to empower a municipality to perform its functions.	No	Yes	Medium	Linking of municipal public works programmes with EPWP. Generally focused on infrastructure development and maintenance.
Housing		No	Yes	-	-
	Housing facilitation (managing developers, housing lists etc).	No	No	High	In line with the implementation and monitoring of the allocations for urban expansion (land use budget and previous section of the implementation framework).
	Acting as developer of housing.	No	No	High	Aiding in the realisation of the SDF proposals on housing (urban expansion etc.). In line with Strategy 1, 8 and 9.
	Landlord (owning and managing housing stock).	No	No	High	Aiding in the monitoring and maintenance of the SDF proposals on housing (urban expansion etc.).
Traffic and Policing		No	Yes	-	-
	Community safety	No	No	Low	South African Police Service and local community cooperation.

	Control of public nuisances	No	Yes	Low	Not applicable to the SDF.
	Driver licensing	No	Yes	Low	Not applicable to the SDF.
	Motor vehicle licensing	No	Yes	Low	Not applicable to the SDF.

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